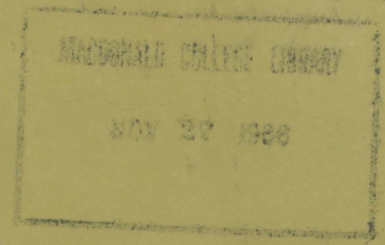


THE MACDONALD JOURNAL

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Cover Story

As on page 17 I thank Steve Tinker for his delightful cover, which he did especially for this issue, I wish only to add here that I hope it will draw you to the article on deer by David Brown and that you will find it as interesting as I did. David writes of his research with both sensitivity and objectivity — he has a "way with words," and I hope we will be able to share his talent with you again. The lead articles have been in the idea file for some time. Knowing that 1986 was the 60th anniversary of Agricultural Economics at Macdonald, Professor Garth Coffin and I wanted to use this special occasion to bring you up-to-date not only on the Department but also on some of the graduates who took economics while at Macdonald. We also thought of an article on graduates who had done well in agribusiness — and who more appropriate that the McEwen brothers from Ormstown, Quebec. I thank Garth Coffin for travelling to Toronto to talk with them and the McEwens for their willingness to share their thoughts on various topics with our Journal readers

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The Sweet Side of Life



Murray, left, and Alton McEwen take time out from busy schedules to discuss their ties with Macdonald and their careers in business.

Garth Coffin *I'm sitting with Murray and Alton McEwen in the office of Redpath Sugars in Toronto, and we're going to discuss how these gentlemen got to where they are in the agribusiness world. It's rather unusual, I think, that two members of the same family end up as presidents of two large business organizations, both of which are engaged in the production of products to sweeten our lives. We're also interested in their success because they are both graduates of Macdonald College — Murray in '53 and Alton in '66. I'll start by asking you, Murray, to tell us a bit about Redpath Sugars of which you are President.*

Murray McEwen Redpath Sugars was founded in 1854 by John Redpath when he built a refinery on the Lachine Canal in Montreal. The company has grown, thrived, and survived since

then in an industry that has had a lot of ups and downs and is in a fairly healthy position today. It services eastern Canada with a full line of refined sugars. We have about 375 employees in the Redpath Sugars refinery in eastern Canada. It is also involved in sugar refining operations in the northeastern United States, with a refinery in New York, and beet sugar plants in the midwest. The company has also been involved in a diversification program, recognizing that the future of sugar is such that it is not a growth business. It is involved in extruding and moulding plastics, particularly for the automotive and building trade. At present half of the company's income is derived from its non sugar activities.

Garth Coffin *Alton, would you tell us something about Rowntree Mackin-*

tosh and your responsibilities as President of the Canadian organization?

Alton McEwen The parent company, Rowntree Mackintosh PLC, was started in York, England, and the head office and the major portion of the U.K. operations are still located there. The Canadian operation is now made up of two parts: the original Rowntree-Mackintosh, which saw Rowntree as the leader in the Canadian confectionery business for many years, and the second part, Laura Secord, which was acquired by Rowntree in 1983. The parent company, which sells products in some 141 countries, has world-wide sales of slightly over \$2 billion in Canadian terms. The Canadian operations represent about 10 per cent of the company world-wide. Rowntree is perhaps better known by its brand names for its leading chocolate bars,

such as Coffee Crisp, Kit Kat, Smarties, and, in boxed chocolates, Black Magic and After Eight. As part of the Laura Secord business, in addition to the 200 plus stores that they operate, there is the Smiles confectionery business, better known for products such as Turtles.

Garth Coffin *I'd like to go back now to the early days when you grew up on a dairy farm in Ormstown. What do you recall from the experience of growing up on a farm and in a farming community that may have contributed to your success today?*

Murray McEwen We had parents with a lot of good common sense who made us work as hard as they could. We had a very practical upbringing. We also had good neighbours who we worked well with at harvest time and played hard with when we were youngsters. These types of things probably contributed in helping us along the way.

Alton McEwen I would certainly reinforce that the hard work ethic we were exposed to has been somewhat useful over the past few years. In addition, I appreciate the general tone of honesty which prevailed in our upbringing and the respect for other people.

Garth Coffin *What prompted your decision to go to Macdonald College?*

Alton McEwen Coming from Ormstown, my entry into Macdonald wasn't quite as automatic as one might think. I did it via the route of the Maritimes, having spent a couple of years at the Nova Scotia Agricultural College, which was introduced to me by a particularly close friend. Having spent a couple of very enjoyable years down there, it just seemed to be the right thing to move on to Macdonald College.

Murray McEwen The truth of how I went to Macdonald is that a good friend of mine, Doug Glover from Ormstown, had a girl friend who was taking a summer course in the School for Teachers, and he took me down to visit her. Frankly I had never seen so many girls in one location at one time, and I thought Macdonald must be a pretty decent place to go to, so I dropped

over to the Registrar's office to see if I could get in. I split my option between economics and animal husbandry. I must say in my early years I had some difficulty with some of the physics and chemistry courses, but in the final analysis Professor Rowles was good to me and did pass me.

Alton McEwen I went into a program that was new at the time: Food Management with Dr. Jean David.

Garth Coffin *It has to be unique that both of you have ended up on the "sweet side of life", so to speak, in the business end of things, but you have chosen somewhat different career paths to get here. I would like to trace these quickly now. Murray, I believe Green Giant was the first stopping place in your career path.*

Murray McEwen When you think about it, you probably don't really choose where you are. Circumstances and events get you there. As a college student I worked at the Green Giant company in the summer time, and when I graduated they chose to offer me a job. I worked for them for 10 years, then was invited to go to Prince Edward Island to start a frozen food operation for Seabrook Farms Frozen Foods. We started that operation, got it going, and completed the five-year contract. I then returned to Quebec and had an opportunity to join the sugar business and have been in this business for 20 years.

Alton McEwen My arrival in the "sweet business" was somewhat coincidental. As did Murray, I worked my summers at Green Giant which, if you were of the male species in Ormstown, seemed to be the appropriate way to finance a college education. After graduating I joined Ogilvie Flour Mills which, quite shortly after, was acquired by John Labatt Limited. It was through Labatt's move to various areas of the food business that my career developed, most of the time being with Catelli, actually 16 years. From there I was transferred to Laura Secord which was also part of John Labatt Limited. About a year after my transfer, the company was subsequently acquired by Rowntree Mackintosh of England, and that's the way I arrived and still remain in the sweet business.

Garth Coffin *Returning to the theme of what has been useful to you along the way, how did Macdonald prepare you for your careers?*

Alton McEwen First of all, not to downgrade the scholastic side at all, I do believe that Macdonald College introduced all individuals to an environment and atmosphere where you went to socialize and enjoy other people and work closely with them. I think that's something that maybe many Mac grads carry with them throughout their careers. On the academic side as I pursued a career in sales and marketing I certainly always felt that I had an advantage over the rest of my peers in that I had a technical background in food that I could fall back on. I could have meaningful conversations with people in many areas of the company which was somewhat difficult for people without that kind of background.

Murray McEwen I think the exposure to fellow students, many of them from rural areas who had been brought up with, as Alton said, the work ethic — good common sense, practical people — did a lot to prepare us for going out into the real world and dealing with situations in a practical way.

Garth Coffin *How do you perceive today's agricultural graduates' state of preparation for careers in business?*

Alton I have had quite limited exposure to recent graduates other than when I was teaching some courses at Macdonald. At that time I was impressed by the quality of people that I was working with.

Murray McEwen Like Alton, during my lecture term at the college I was impressed with the appetite the students had for what was going on out there in the real world, and the way that they really cross-examined you about what one had to do to get ahead, how companies operate, what were relations with governments, what were the various publics you had to deal with, and how did you deal with them. This desire for that kind of information was far ahead of what we saw back in our time at university. Graduates coming out of universities today are better prepared than we were. Certainly technology and computers and those types of things have changed the world, but

I think we've got a good, bright bunch of graduates in many areas. Unfortunately, I don't think they have enough exposure to practical situations which they would like to have, and there just aren't enough opportunities for them.

Garth Coffin *Both of you did contribute your time very generously as teachers for a period of time. That's certainly one way in which business and university can relate more closely and that business can, in fact, contribute to the enrichment of the university experience from the students' point of view in bringing that real world into the classroom. Are there other things you would like to see happening in terms of relations between university and business?*

Murray McEwen I have a feeling that many graduates are not gravitating to agribusiness companies or agribusiness situations as much as they could, and possibly the fault lies with agribusiness. I know our company and others that are looking for graduates do not always go to agricultural colleges. We're trying as much as possible to hire MBAs, but I think that somehow there should be a better way to put these two interested parties together.

Alton McEwen For the last three years I've served as chairman of the Advisory Council at the University of Waterloo for the School of Management Accounting. Actually, I'm working with a classmate from Macdonald College, Dr. Howard Armitage, who is an associate professor in management accounting and, on quite an on-going basis, we are addressing this very issue. The University of Waterloo runs a co-op program where the students are out for at least three months during the year and are sometimes out on 12-month work periods as they are completing their degrees. As much as it is a real difficulty to find good opportunities and good jobs with relevant experience, where it can be done it certainly prepares these students to a greater extent for their future careers and exposes them to the business community.

The other role of the Advisory Council is that of providing direction to the staff of the university in terms of setting the curriculum for the students to

make sure that it is in tune with the needs of the future. Certainly, in theory, one has to be quite committed to this approach, and I think the success enjoyed at the University of Waterloo has demonstrated that in time arrangements of this type will be very productive.

Garth Coffin *Are there opportunities for exchange where business executives might want to spend a certain amount of concentrated time on a university campus or where there might be opportunities for university people to spend some time within a business organization and contribute in some productive way there?*

Murray McEwen In theory it's a good idea; in practice, very difficult. If you're running a lean, thin organization as you have to today, you don't have good people to make available to programs like this, much as you possibly should. It ends up being somebody who is not in an extremely key, day-to-day role that might be available for this type of exchange. To bring somebody in from a university, to expose them to your work and the way a company operates would be a good idea, but we haven't seen a lot of opportunities where people are available to come in and do that.

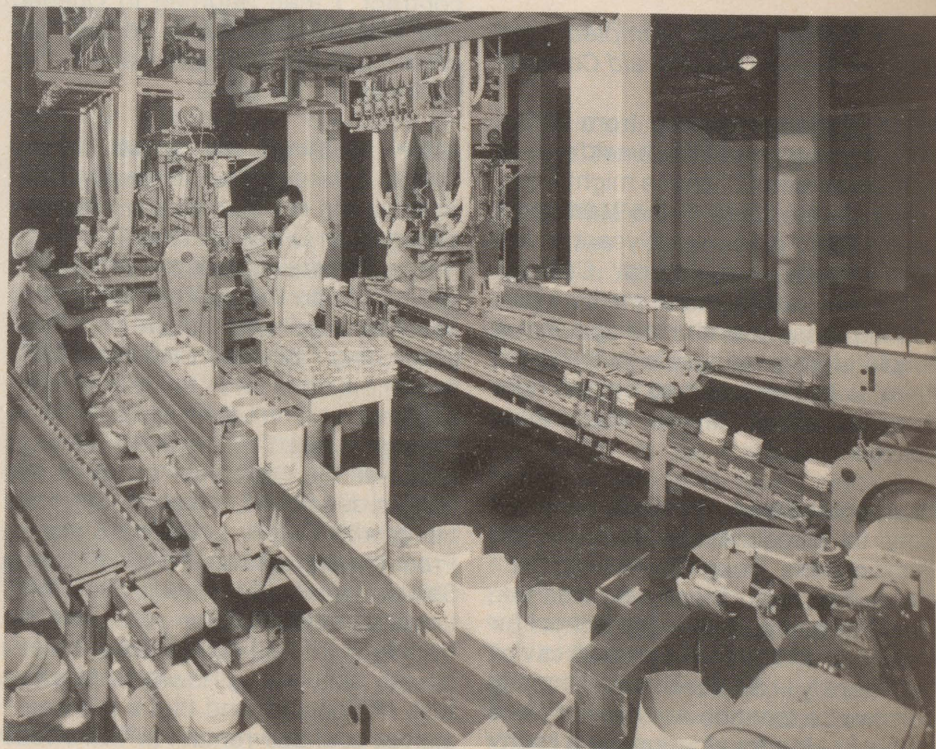
Garth Coffin *While business takes up a great part of your lives, you can't live totally in that world. I know that both of you have maintained close contact with the rural lifestyle. Murray, you're living west of Toronto in farming country. What do you do to relax and get away from the pressures of business?*

Murray McEwen one of the great things about living in the country is that every day when you drive home from work you're going on a country vacation. Unfortunately, the next morning brings you back to reality when you have to fight your way back in. Besides living on a farm and growing some crops and a few thousand pine trees, whenever we have the opportunity to travel we do some mountain hiking. We've hiked up half a dozen of the highest mountains in the world that you can walk up. We also enjoy cross-country skiing and tennis.

Garth Coffin *Alton, you have some land northeast of Toronto.*

Alton McEwen The closest my 10 acres could come to being called agriculture is that my lawn generally looks like a hay field and is somewhat appreciated by my neighbor's horses that reach over the fence to get at it.

We do have a couple of children, 11 and nine years old, and our free



Refined sugar being packaged at Redpath Sugars.



Rowntree Mackintosh acquired Laura Secord in 1983.

recreational time is geared to running them around to local events and taking holidays with them which gives us a little time together. I enjoy the odd game of golf and am a member of the nearby club.

It would be very amiss not to mention, for both Murray and I, that someone that does contribute to a career is the spouse and this is another one of the excellent things that I took away from Macdonald College: my wife. She has generally managed to give me appropriate direction and help through the development of my career.

Garth Coffin *Both of you have maintained fairly close contact with Macdonald College over the years. You have both been involved, at one time or another, in major fund raising activities and have contributed a great deal to Macdonald. Can you tell us something about what it means to you to maintain that contact with Macdonald?*

Alton McEwen It is certainly always enjoyable to meet old friends from Macdonald. It is in one way a reminder of the good times but also it is spending some time with what are good quality people. I must admit that my direct exposure to the university over the last four or five years has been somewhat remote since I have relocated in Toronto.

Murray McEwen Certainly the friendships that were made at that time are enduring, and I don't think a week goes by that I'm not in touch with graduates, particularly from my era, who may be in similar businesses. I think of Jim Wilding who is in the insurance business, and we had an opportunity to be in New Zealand this past January and visited Jim Currier who is a Mac grad of my time. The various college reunions are a great time to renew old friendships. I think the friendships that were made at that time are lifelong.

Garth Coffin *What advice would you give people considering a university education and beyond that to agricultural graduates joining the professional labour force?*

Alton McEwen Choosing agriculture or agribusiness as a course to pursue probably exposes one to as broad a field as any other course that is available. One might be able to say something similar for courses in business and commerce which give general exposure in many areas. At least at the undergraduate level an individual should still choose a course that is somewhat general and which offers an individual a lot of scope and opportunities upon graduation, because the amount of job opportunities are somewhat limited compared to what they have been in the past.

To a graduate going into the work field, one would have to advise them to be patient. They may not get the most ideal position initially, but should take what they can and get their career started.

Sales and marketing, for example, probably exposes people to more facets of a business and of the world and people in general than some of the more defined positions and that is not taking anything away from the technical side, which is the area I started in. There could be more opportunities today in the general sales and marketing area, but one should not in any way play down the great importance of finance and accounting in today's environment.

Murray McEwen The greatest problem we have today is that the people in our companies and in government don't understand the business we are in so exposure to every facet of the business is important. The advantages for people in sales and marketing is that they are more exposed to people and, at the end of the day, it is a people world we are in; if you can't get along with people, you are going to have a very hard time to get ahead.

It is important for everybody to work hard and play hard because it is better to wear out than to rust out.

Garth Coffin *That is a suitably profound statement on which to end our conversation with Murray and Alton McEwen.*

Sixty Years of Agricultural Economics at Macdonald College

by Dr. Lewis Fischer
Department of Agricultural
Economics

(For reasons of space, Dr. Fischer's speech to the members of the Canadian Agricultural Economics and Farm Management Society at Macdonald College on May 27th has been condensed.)

Introduction

In 1926 when the Department was created I was a student at the University of Halle in Germany. There was no Department of Agricultural Economics; agricultural policy and farm management were handled in separate faculties. Needless to say, such circumstances made a PhD program extremely difficult. In many cases the candidate acted as a catalyst between professors of different economic (and political) persuasion. In addition to that, being a candidate for the Doctor of Philosophy degree one had to take four full courses in Philosophy. Our peers in other faculties used to tease us as to whether the potatoes grew better if we talked to them about Kant, Schopenhauer or Spinoza. This system was sustained in major universities in Germany and practically all over continental Europe until the end of the Second World War.

In the United States the pioneers of agricultural economics in the early 1900s were mainly professors of agronomy or animal husbandry. Many general economic teachers included production economics in their lectures. The first course specified as "Economics of Agriculture" was offered at Harvard in 1903. In the same year Professor H.C. Taylor, author of the classic reference "Outlines of Agricultural Economics" began giving a course under the same title at Cornell University. (Black, 1953)

Agricultural colleges in Quebec were well in advance of some others in Canada in introducing Agricultural Economics in the curriculum. In 1918 C.A. Fontaine was appointed lecturer in Economics at the Institut Agricole d'Oka. At the School of Agriculture at



Dr. Lewis Fischer addresses the members of the Canadian Agricultural Economics and Farm Management Society.

Agricultural Economists Meet at Macdonald for Annual Workshop

The Department of Agricultural Economics, in collaboration with Extension Services, played host to the annual Workshop of the Canadian Agricultural Economics and Farm Management Society (CAEFMS) on May 26-28, 1986. This marked the first time that the Society has held its Workshop at Macdonald, bringing together more than 60 agricultural economists from government, business, and universities across Canada. The event coincided with the celebration of the 60th anniversary of the Department of Agricultural Economics at Macdonald College.

The CAEFMS is the national Society which provides professional affiliation for agricultural economists and farm management specialists practicing in Canada. A workshop is held each year to provide members an opportunity to learn and to contribute their knowledge on a topic of current interest to the profession. The theme for 1986, "In Search of Common Ground in Canadian Agri-Food Policy," was chosen to address the various sources of conflict

which tend to surface in policy formulation. Speakers were asked to address the issues of regional conflict, vertical conflict (eg. producer versus processor) and jurisdictional conflict (federal-provincial), and to identify elements of common interest as a foundation for agri-food policy in Canada. Included in the program were presentations by Mr. Gaston Grammond, Assistant Deputy Minister of the Quebec Ministry of Agriculture, Fisheries and Food, and Mr. Pierre Blais, M.P., Parliamentary Secretary to the Minister of Agriculture in Ottawa.

On the brighter side of the program, the 60th Anniversary of the Department of Agricultural Economics was observed at a luncheon at which Dr. Lewis Fischer spoke on the history of the Department. His paper, which pays tribute to the pioneers, is summarized under the heading of "Sixty years of Agricultural Economics at Macdonald" on this page. To commemorate the event the Department was also presented with a plaque from the CAEFMS and a gavel from the Depart-

Ste. Anne de la Pocatière, a Department of Rural Economics was established in 1920.

At the outset, at Macdonald College, similar instruction was given to both diploma and degree students. This policy was continued up to 1920. The large number of courses included courses in Rural Economics, generally given by visiting lecturers. In 1920, following the inauguration of a special Winter Course, later renamed Diploma Course, lectures in Economics were given by Dr. H.D. Brunt of the Department of English, who became Lecturer both in Economics and English. (Snell, 1963, p. 116)

The First Two Decades (1926-1946)

In 1926 a Department of Agricultural Economics was created with Dr. J.E. Lattimer as Chairman. He held this position until 1947 and retired in 1949. He came from the University of Alberta

where he taught animal husbandry. In between he had completed his PhD at Wisconsin. During the two decades Professor Lattimer headed the Department, there was a socioeconomic turnaround in the agricultural setting all over the industrialized world which transformed Canadian agriculture as well. The crucial characteristic of the process was a substantial mechanization of production with concurrent reduction in the number of operators. Farmers' access to capital was limited. Consequently small farmers — the majority of Quebec farmers — were unable to cover the investment needed for modernization. Professor Lattimer's teaching focussed on Farm Organization and Marketing as well as on Cooperation. His course Economics of Agriculture concentrated on domestic and international problems inherent in agriculture.

Dr. Lattimer was a prolific writer and travelled extensively in North America and Europe. In recognition of his

influence on the profession the Fifth International Conference of Agricultural Economists in 1938 was held at Macdonald College. This was the first meeting of that prestigious organization in Canada.

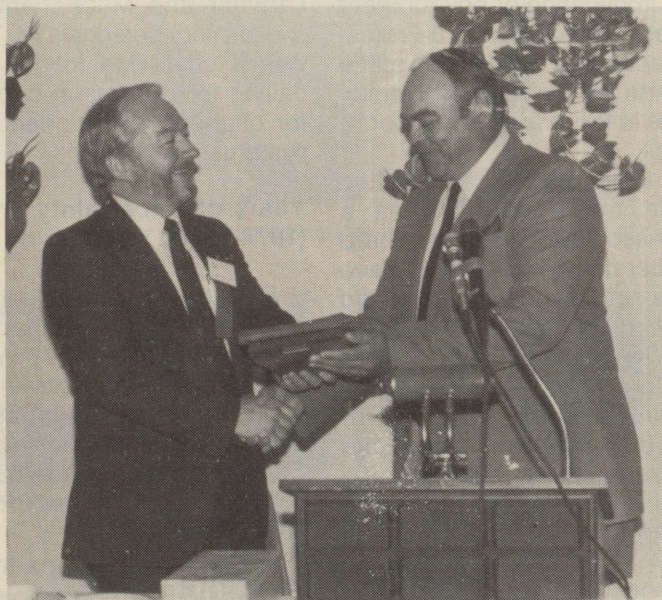
Dr. Lattimer was a veteran of World War I. His Department provided a correspondence course to the men in the services and encouraged them to study agriculture in general and agricultural economics in particular. People who remember, characterize him as "a military man." He supported the movement for re-establishing ex-soldiers on the land after the war. In class he called for discipline and expected strict, comprehensive response to questions. His research work focussed on problems affecting post-war agriculture in Canada. He conducted a number of surveys in the Maritimes, Quebec, and Ontario. The results were published as Bulletins which served a useful purpose for students who were almost entirely dependent on foreign text. (Snell, 1963)

Toward the end of Dr. Lattimer's chairmanship, in 1945-46 Economics was offered as a "major subject." Students electing Economics as a major subject took part of their work in the Department of Economics and Political Science at McGill. That system was sustained for the next 30 years.

Years of Expansion (1947-1974)

In the wake of the Second World War, registration in agriculture increased significantly. The annual average of the four war years (1942-45) was 195 and that of the four post-war years (1946-1949) was 510. The need for more human resources was evident. Availability of funds and the retirement of Professor Lattimer provided the opportunity to double the departmental staff. David L. MacFarlane and Gordon L. Burton joined the Department in 1947. Dr. Burton left in 1951 to return to cattle business in Alberta. David MacFarlane headed the Department until his retirement in 1974.

David L. MacFarlane came from Saskatchewan and received his Ph.D. from the University of Minnesota. He was a scientist with many interests. His wartime services in Washington and Ottawa generated contacts with politicians which he sustained and extended during his academic career.



Garth Coffin, left, receiving a plaque on behalf of the Department of Agricultural Economics from Rollie Hayman, CAEFMS President.

ment of Rural Economy at the University of Alberta.

In total, the program organized by the Agricultural Economics staff at Macdonald in consultation with CAEFMS President Rollie Hayman (N.S. Department of Agriculture) and President-Elect Murray Hawkins (University of Alberta) was well

received. In addition to the opportunity to enrich their knowledge of policy issues, workshop delegates had the opportunity to visit Macdonald College, many of them for the first time. Many are expected to return when the Agricultural Institute of Canada, including the CAEFMS, meet in Montreal in 1989.

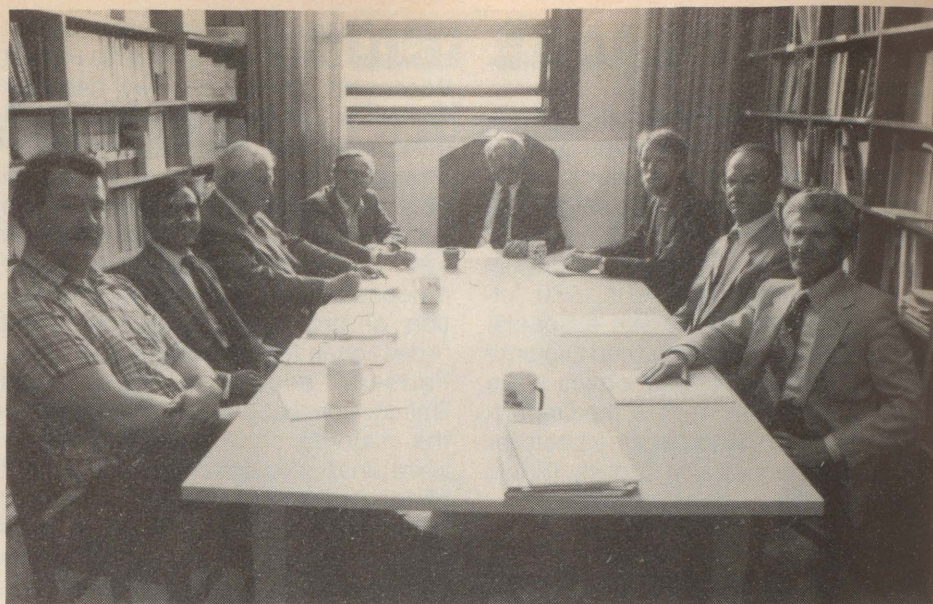
As an agricultural advisor to Lester Pearson, he was involved in political issues which were often discussed in lectures. As one of our distinguished guests Mr. Walter Grant remembers:

"David MacFarlane was always able to stir up an argument with his students after he got through analyzing the figures on Maritime agriculture. Both of these people (MacFarlane and Burton) challenged students and were particularly fond of analyzing farm policy issues.

The crucial phenomena of Canadian agriculture in the 1950s and 60s were (a) the growing surplus in unsold products generating the absolute and relative decline of net farm income; (b) the increase of governmental intervention in agriculture. Professor MacFarlane's teaching concentrated on farm policy emphasizing that farm income is an objective or criteria of agriculture policy. He was economic consultant to the Quebec Agricultural Marketing Board: the problems of Quebec agriculture were often subject to discussion in term papers or in seminars.

Professor William E. Haviland came from Ontario and received both the M.A. and Ph.D. at Harvard University. During his professorship at Macdonald College (1953-58) his teaching was focussed on theoretical and analytical rigour at both micro- and macroeconomic levels. Professor Haviland was editor and president of the Canadian Agricultural Economic Society. He maintained close personal relations with the Department of Economics at McGill which was very helpful to the agricultural economic majors. He travelled extensively in Latin America, Europe, Africa, and India. His activity in such a variety of positions further advanced the prestige of the Department. At present, Dr. W.E. Haviland is Auxiliary Professor of Agricultural Economics here at Macdonald.

Professor Cecil B. Haver came from Saskatchewan and received the PhD at Iowa State. He joined the Department in 1960 and left in 1972. His special field was farm management. The major objective of his approach was to get the student acquainted with the understanding of economics in farming. He organized several farm tours all over Quebec bringing together students and farmers to evaluate the eco-



Current Agricultural Economics staff, l to r, L. Baker, K. Gunjal, L. Fischer, C. Green (Associate Member), G. Coffin (Chairman), J. Henning, Z. Hassan (Auxiliary Professor), O. Al-Land. (Absent: M. Couture, W. Haviland (Auxiliary Professor), and J. Broxup (Secretary).

nomical aspects of farming. He initiated electronic farm accounting in Canada. Cecil Haver was one of the new agricultural economists who recognized and included in teaching the reciprocal implication of environment and farm economics. In 1972 Professor Haver accepted the position of the Dean of Arts at Bishop's University and now he is there as a professor of economics.

In 1963 David MacFarlane invited me to join the Department as a Research Associate. It is not too hard to remember the years that I have been a member of the staff headed successively by three Chairmen. Memory is a pleasure that grows richer with age. Our joint work has dealt with agro-economic issues in the Third World, the EEC, Eastern Europe, and the liberalization of agricultural trade among many other topics.

In the early 1960s research on the agricultural economic situation in developing countries was embodied in the programs. The most important achievement in that area was Professor MacFarlane's contribution to the establishment of the research institute for the oil palm industry in Nigeria. In addition to that he acted as a consultant in Pakistan, Mali, Haiti, and Afghanistan.

A lasting product of the Department evolved from its contribution to the work of the Federal Task force on Agriculture headed by Professor MacFarlane in 1969. The Task Force

Report is a widely known source of information both for professionals and the general public.

The first 48 years in the history of the Department were dominated by Lattimer and MacFarlane; two men with distinct personalities. Their legacy was a challenge to the successors calling for reforms in curriculum and for changes in the orientation of the system.

Years of Uncertainty and Revival (1974-1986)

Dr. Gordon MacEachern served as Chairman of the Department from 1974 to the fall of 1978 in a part-time capacity while also remaining as President of the Agricultural Economic Research Council of Canada based in Ottawa. He received his BSc at Macdonald in 1947 and his PhD from Purdue University.

In 1975-76 the Department moved from requiring courses at McGill to teaching all courses required in the BSc program on the Macdonald campus. At the same time the Department began to offer several graduate courses as electives in the MBA program at McGill.

Mr. Patrick Moncrieff was Executive Director from 1974 and then served as Acting Department Chairman for the first few months of 1979. During his time he established an *ad hoc* arrangement for graduate studies leading to the Master's degree with the Depart-

ment of Renewable Resources. This process was aided by Professor Osama Al-Zand who joined the Department in 1976. In addition to teaching various courses both at undergraduate and graduate level, he accepted the responsibility for the graduate program. His first MSc graduate from Macdonald received second prize for his thesis while his second graduate was granted first prize in the thesis competition of the CAEFMS. Professor Al-Zand solicited the assistance of Dr.

Z. Hassan of Agriculture Canada. In his capacity as an Auxiliary Professor Dr. Hassan and Professor Al-Zand initiated and strengthened the very valuable cooperation between the Department and Agriculture Canada.

A new era began as Dr. Garth Coffin accepted the Chairmanship of the Department in 1979. The faculty had already initiated and partly completed some changes in teaching and research while the student body had expressed keen interest in the new

orientation in agricultural economics. Many of the courses attached new emphasis on management and decision-making, including extensive use of case-studies. In that context I quote one of Professor Coffin's statements about the type of graduates this Department is trying to produce "competent business people with a social conscience."

The Department has had important changes in human resources: Kisan Gunjal, Laurie Baker and John Henning have joined the staff since 1981, effectively doubling its strength and multiplying the courses offered. The program expanded with courses in econometrics, agricultural finance, and special topics. The BSc program has been reorganized into agribusiness and agricultural systems orientations.

The Chairman's efforts to establish the MSc program brought the project into the final stages of approval by the Quebec Government. Furthermore the Department is also involved in the development of the new three-year diploma program.

Professor Coffin says "I am as encouraged and optimistic about our future prospects as I am pleased about our accomplishments to date." Let me strengthen this statement with some statistics. The number of graduates in Agricultural Economics in the five years 1975-1979 was 26 and it increased to 74 during the period 1981-85.

The 60 years of the Department's history have seen much turbulence in the country, in the province, and in the university which at times threw normal college routine into disarray. Despite the obstacles we now celebrate the sixtieth birthday of a strong academic unit, the reputation of which is widely acknowledged. My remarks pay tribute to the pioneers who created it, and praise the successors' achievement reflected in the present status of the Department of Agricultural Economics at Macdonald College.

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Drs Lewis Fischer and W.E. Haviland compares notes on the Workshop over coffee.



Dr. Cecil Haver, right, former member of the Department, was welcomed back to Macdonald by Dr. Coffin when he gave a special seminar for the students in Economics.

One of Mac's Finest

A Tribute to Walter Grant

by Hazel M. Clarke

At least three Macdonald graduates — by coincidence all from the Maritimes — played an active role at the Canadian Agricultural Economics and Farm Management Society Workshop held May 26-28 at Macdonald College. Two of those graduates, Walter Grant and John Tait, had majored in Agricultural Economics while here. Walter Grant, BSc (Agr) '52, was presenting a paper at the workshop, Rollie Hayman, BSc (Agr) '66, was President of the Society, and John Tait, BSc (Agr) '68, was chairman for one of the sessions. Against a background of cheerful registration and reception noises that got louder, particularly as I talked to the last two grads, I learned a little of their thoughts on Mac and their careers since graduating. With Rollie Hayman and John Tait the talk so often turned to Walter Grant and his successful career that this piece has become, in our small way, a tribute to the man and his accomplishments.

Walter Grant has fond memories of his days at Macdonald. From a small farm in Yarmouth, N.S., he said that from an early age he had wanted to study agriculture and, as have so many others, he came to Mac via the Nova Scotia Agricultural College, arriving here in the fall of 1950. "After NSAC the finishing school was Macdonald College. It was automatic in those days for a fairly large contingent of Maritimers to come up. I had some difficulty in deciding what option I wanted as I was interested in agricultural science and also in the economics of the industry. I went into economics with David MacFarlane as the head of that option.

"The Dean, Dr. Brittain, had roots in the Maritimes and had worked there, and he is one person that I remember well. I remember the rapport that he had with students and the help that he gave them. In my fourth year I was president of the College Royal, which was a big affair at the time and meant a lot to students. I can remember Dr. Brittain taking me into his office and setting the standards that were



Three Maritimers, l to r, Rollie Hayman, Walter Grant, and John Tait enjoying the CAEFMS Workshop at Macdonald College.

expected to be maintained for the event. We spent quite a bit of time making sure that we did everything right.

"All of the professors were extremely helpful. Dr. MacFarlane probably gave me my real start towards a professional career. There was a growing interest in the whole area of farm business management and because of its leadership in that field Dr. MacFarlane helped me get into graduate school at the University of Connecticut. He helped several students including Charles Berridge, Ted Booth, and Garth Coffin to further their studies at that university.

"The fact that we held McGill degrees meant a great deal to the professors at the University of Connecticut. McGill was well known to them and the background that we had in science, math, statistics, and so on was far superior to what our classmates had from other American universities at that time. I owe a lot to Macdonald in terms of starting me off on the right foot and also because the professors never really lost touch with their students after they left. I met them in the Maritimes and, in turn, I have been back for seminars and various other special events. This all helped in my career and development."

After finishing his graduate work Walter Grant joined the staff of the Nova Scotia Department of Agriculture and Marketing as a farm management specialist and a lecturer at N.S.A.C.

"I had the opportunity to work with the extension service and start in the development of extension farm business management programs. I did that until the early 60s. We were trying to give farmers an appreciation of the business side of farming. We did a lot of pre-loan counselling. As borrowing money and financing farms was just beginning in earnest, it was an exciting world to be involved in."

Walter Grant became Director of the Extension Services in 1964 and this gave him the opportunity to work on the development of programs, placing a lot of emphasis on the area of business management. "I also became very involved in the 4-H program in the province," he said. "I found this extremely gratifying work." Through his work with 4-H in Nova Scotia he went on to become President of the 4-H Council of Canada.

As Director of Extension, Walter Grant came back to Macdonald quite often to hire students. "It was difficult to hire them in the late 60s," he recalled. "I remember my interview with one chap who is on staff right now. I asked him how many job offers he had had. He said seven firm ones. We had to work hard to get students to work for us because we couldn't compete with others on the basis of money. We did secure a lot of good staff by offering them opportunities for education, for travel, and for involvement in different things. Over the years we have hired a number of Mac grads

and they have all excelled and done very well.

In 1975 Walter Grant became Deputy Minister of the Nova Scotia Department of Agriculture and Marketing. When we talked in May he was the longest serving Deputy Minister of Agriculture in Canada.

As he planned to take early retirement in June, Walter Grant thought about some of the highlights of his career as Deputy Minister and said that two projects stood out in his mind. "One project that I put very high on my list when I became Deputy Minister was the development of the Nova Scotia Agricultural College. The college has become a degree-granting institution, a number of new buildings have been constructed, and these things have given me a lot of personal satisfaction. As well, it has been a real pleasure for me to participate in the agricultural development agreements between the federal and provincial

governments. A great deal of work and negotiations were needed in order to get these agreements off the ground, but they have been a big benefit to the development of agriculture in Nova Scotia."

After taking some time to regroup, Walter Grant hopes to be able to use some retirement time to work around NSAC.

"I'm very interested in people and in the area of staff development and management, and I hope I may be able to get involved in that whole area," he said.

One more highlight took place at the May 7 convocation ceremonies at NSAC when Walter Grant was named an Honorary Associate. His two colleagues Rollie Hayman and John Tait were pleased by this recognition.

Both these Mac grads also came to the college via NSAC where, interestingly enough, they had had Walter Grant as a teacher.

Freer Trade and Quebec Agriculture

"The effects of Freer Trade on the Agricultural Economy of Quebec," will be the topic of a one-day seminar to be held on Thursday, November 27, 1986, at Macdonald College. This seminar is sponsored by the Quebec Women's Institutes and has been organized in co-operation with the Department of Agricultural Economics and other staff at Macdonald College. The seminar will begin at 10:00 a.m., and registration (9:30 a.m.) for the day, including lunch and refreshments is \$20.00.

Following opening remarks by Lucy French, President of the QWI, and Dr. Roger Buckland, Dean of the Faculty of Agriculture, guest speakers in the morning session will be Mr. Jim Lohar, Assistant Director of the International Trade Policy Division, who will speak on the "Nature and Importance of Agricultural Trade with the USA," Ms Carol Goodloe, Canadian Analyst, Educational Research Service, who will speak on "US Interests in Agricultural Trade with Canada," and Dr. Yvon Proulx, Department of Rural Economy at Laval University, who will speak on the "Competitive Position of Quebec Agriculture." Marcel Couture, Associate Dean of Macdonald, will chair the morning session, which will include time for discussion and questions.

Dr. Garth Coffin, Chairman of the Department of Agricultural Economics at Macdonald College, will open the afternoon session with "What are the Issues for Quebec Farmers?" With Marc Côté from CBC's Radio Noon as Moderator, four producers will present their viewpoints: for Dairy, Warren Grapes, President of the Quebec Farmers Association, for Hogs, Lise Bergeron, Secretary of the Federation de porc, Union des Producteurs Agricoles; for Horticulture, William Beattie, President, Beattie and Sons, and for Poultry, Serge Deschamps, Secretary, Federation des Producteurs de Volailles du Quebec. Again, there will be plenty of time for discussion and questions from the floor. QWI Past President Gwen Parker will chair the afternoon session.

Similar seminars are to be held across Canada and the results presented to Ottawa in a brief prepared by the Federated Women's Institutes of Canada.

The implications of freer trade are of concern to all Quebecers and all Canadians, and the Quebec Women's Institutes is looking forward to a good turnout for this important seminar. For further information, please telephone the Quebec Women's Institute Office at Macdonald College, (514) 457-2000, local 278.

Rollie Hayman, who came from a farm some 30 miles north of Truro graduated in '66, and John Tait, a native of Truro, graduated in '68. "Walter Grant was an excellent teacher," John recalled. "He was mostly responsible for getting me into economics."

Rollie, who is assistant director of the N.S. Agriculture Department's Extension Branch, is mainly responsible for the farm management division and the province's agricultural representatives. He has been back on campus several times and has watched the changes that have taken place since '68 with interest. He's hired many Mac grads in that time but John Tait, who heads up the Economics and Business Department at NSAC, reminded us that as they are now granting degrees, more grads may be hired from there.

Remembering his own reasons for coming to Mac, John hopes that some of the students at NSAC will consider doing their graduate work at Mac. "I thought it was good for Maritimers to get away from the Maritimes for awhile and broaden their horizons and experience. I certainly felt very good about being here."

Until the workshop came up in May he hadn't been back on campus. He found the new campus and buildings very impressive. "It's still beautiful," he said, "and I'm pleased that they have managed to keep the trees and the marvelous green areas."

As a General Agriculture student, Rollie Hayman had Dr. Nikolai Nikolaiczuk as an adviser, and he has fond memories of him. He said he developed his interest in agricultural economics through his work and did his Masters in that particular area. As mentioned before, he's been back on campus before to hire students. This time he was here as President of the Canadian Agricultural Economics and Farm Management Society. Both he and John were proud of their former teacher and ultimately their boss's recent recognition by NSAC and we at Macdonald also extend congratulations.

(Since this was written Walter Grant has been appointed chairman for Nova Scotia of the Federal government Farm Debt Review Board. Rollie Hayman has been appointed Director of Extension for the N.S. Department of Agriculture and Marketing.

FUN FACT FABLE FICTION

by Ralph H. Estey
Emeritus Professor
Department of Plant
Science

Dismissals

Arthur Higbee, writing to the *International Herald Tribune*, compiled the following list of terms fantasizing the dismissal from particular trades or professions:

Accountant	disfigured
Banker	disinterested
Cowboy	deranged
Detective	dissolved
Dry cleaner	depressed
Electrician	delighted
Gambler	discarded
Hairdresser	distressed
Innkeeper	dislodged
Judge	disrobed
Jockey	distracted
Magician	disillusioned
Secretary	defiled
Waiter	disordered

Onion Power

Inside each cell of a growing onion there is a pressure of over 300 pounds per square inch. Such pressure would blow up a steam boiler.

Hair Brushes

During World War II, camel hair, for artists' brushes, was replaced by the silk hair in cows' ears.

Bourbon Whiskey

The Reverend Elijah Craig made the first Bourbon Whiskey in North America in 1789. It was named after Bourbon County, Kentucky. The process of making it was standardized by Dr. James Crow, whose brand, Old Crow, is still one of the best selling

brands of this unique beverage.

New Year and Xmas

The beginning of the new year may be humanity's oldest celebration or holiday. Various early civilizations celebrated the beginning of the new year at different times. The Egyptians, Persians, and Phoenicians began their year at the autumnal equinox, when day and night are of equal length all over the earth, which, according to our calendar is September 21. The Greeks, until 500 BC, began their new year at the winter solstice, the shortest day of the year, or about December 22. The ancient Romans also celebrated on this date. In 45 BC Julius Caesar decreed that the new year would begin January 1, the first day of his new calendar. Many Romans, and others, insisted on celebrating the return of the sun and longer days. They could be certain that the days were becoming longer by about December 24 or 25, so they celebrated the Feast of Saturn, the birthday of the sun, at this time. In AD 354, Bishop Liberius of Rome ordered the people to celebrate the birth of Christ on December 25, and to honour Christ as the light of the world instead of Saturn.

Many people today write Xmas instead of Christmas. This form of the name originates with the early Christians because the Greek letter X is the first letter of Christ's name, and X was commonly used as a holy symbol.

Caesarean

Knowing that it is an offence to give the wrong answer to questions on legal documents, what answer should one who was born by Caesarean section in a Canadian hospital, give to the question: "Are you a natural-born Canadian?"

Idiot Genius

Tom Wiggins (1899-1907), the imbecile, blind son of a slave girl in Alabama could faultlessly imitate, on a piano, music that had been performed by trained pianists. Blind Tom toured America and Europe and was acclaimed for his ability to listen to a great pianist and then to duplicate his performance, even to the most subtle shades of expression. Physically, he became a man of 250 pounds, but until the time of his death he had the mind of a baby.

Canada?

There can be but little doubt that the greater part of the vast region included under the name of British North America is doomed to everlasting sterility on account of the severity of its climate. *Lippincotts Gazetteer*, 1866

Biological Control

There was a young farmer named Graham Who, though bugs ate his crops wouldn't spray them He explained: "I've a droll But effective control I just catch all the females and spray 'em."

Paupers sale

For nearly a century paupers were sold, by auction, in New Brunswick on the least day of the year. The last of these sales took place on December 31, 1900.

No Infallible Judgements

When I occasionally make a regrettable error in judgement, I am consoled in the thought that God has also made such mistakes. One for which He repented is mentioned in 1 Samuel 15:35.

Humphries' Oil?

In Jefferson County, Texas, there is an oil well that has been spouting oil at the rate of about 30 million barrels a year since 1901, and no one has made a cent in royalties on it. The ownership of the land is unknown and a search for the heir to nearly \$2 billion is continuing. The man who traced Ronald Reagan's lineage to Ireland believes the land was once owned by Mr. Pelham Humphries who was shot dead in a barroom. He had no known relatives.

Truthful Lie?

When a man says "I lie," does he lie or does he speak the truth? If he does lie, he speaks the truth, and if he speaks the truth, he lies.

Up to our Ears

According to the Minister of Finance, the net federal debt in 1967 was \$4000 per Canadian family. In 1987 it will amount to more than \$24,000 per family, and we have to pay interest on every cent of it.

FORAGING IN A WINTER YARD

by David T. Brown
Ph.D Candidate
Department of Renewable
Resources (Wildlife)

I stood motionless in the frigid late-November twilight, my breath rising in a pale halo through the still, clear air. I could feel the cold beginning to penetrate through the thick felt soles of my pack boots, and my teeth chattered in a rapid, barely audible staccato. Hunching down into my parka, I pulled my toque down further over my ears and huddled closer to the wooden power line pole before resuming my silent and stationary vigil. Binoculars at the ready, I scanned the right-of-way for white-tailed deer. Around me, the snow bore the familiar parentheses of deer tracks: deep, dark, indistinct impressions made in snow that was soft and powder-fresh, when the weight of the deer was enough to penetrate through to the imperfectly-frozen earth below; shallower, more detailed tracks made in older snow that the sun had softened during the day, and faint, tentative, almost invisible tracks on the ice covering the shallow ponds and puddles that dotted the hillside. At irregular intervals, the scattered deer trails converged and formed well-travelled runways, part of an intricate network of paths frequented by deer in the wintertime when travel through deep snow is arduous.

Observing deer tracks was one thing — but getting a good, detailed look at the animals that made them was quite another matter, particularly when it was cold enough to freeze my eyelashes to the binocular eyepieces. It wasn't the first time I had stood shivering on the side of this windswept hill, peering into the gathering darkness or the weak gray light of dawn for a glimpse of a whitetail going about its business — and with precious little success. I had just been hired on a two-year industrial contract by Hydro-Quebec to assess the effects of a power line right-of-way on the resident deer population in Rigaud, Quebec, and it seemed that I was experiencing



The first snowfalls of early winter signal the beginning of a difficult period for northern deer.

more than my share of failures in sighting the animals at close range. Dejected and chilled to the bone, I began to think intently about the Thermos of hot tea on the seat of my car, a few hundred meters back on the road, and wondered if I would ever be able to make the detailed behavioural observations that were required for the study. Resignedly, I decided to go back and discuss research strategy with Dr. Jean Doucet, the project director.

I had scarcely begun to move when I noticed a stirring in the woods at the edge of the right-of-way. Barely 20 meters ahead of me, a solitary doe walked slowly into the opening, sensitive nose quivering and ears perked forward in a characteristic alert stance. When satisfied that the coast was clear she relaxed visibly, moving further into the right-of-way and feeding on the woody twigs of a dogwood that protruded through the thin snow cover. My shiver of cold was replaced with a shiver of anticipation — at last, an unimpeded view of a whitetail at close range! I watched her for 20 minutes, recording her postures, movements, and behaviour patterns as she made her way across the right-of-way, stopping to feed and groom herself at intervals, oblivious of my

presence. I was elated — and the first of what would eventually comprise hundreds of close-range deer observations was recorded in my field book. Later, the addition of insulated observation towers to the study area would make deer activity observations much more pleasurable, but those initial shivering sessions gave me a hearty appreciation for the inhospitable conditions of a Quebec winter.

I have always been fascinated by the winter survival of white-tailed deer in northern regions. How could warm-blooded, non-hibernating ruminants eke out a living when confronted with deep snow, cold temperatures, and very limited food resources? Various facets of this question have kept me occupied, as a working biologist and later as a graduate student in the wildlife section of the Department of Renewable Resources of Macdonald College, for the past six years. The main focus of my research has been the foraging behaviour of white-tailed deer in winter.

White-tailed deer have extremely broad diets, encompassing everything from woody twigs, leaves, and herbs to grasses, mushrooms, fruits, and nuts. In late spring, summer, and early autumn, obtaining adequate food is

seldom a problem — the fields and forests are full of succulent, nutrient-rich vegetation, and deer can afford to be selective in their choice of food-stuffs. Late summer and autumn bring a bounty in the form of acorns, nuts, and berries, and many an irate apple-orchard manager has chased away a herd of whitetails contentedly stuffing themselves on his would-be profits. At this time of year, deer are at their heaviest, having transformed the diverse and plentiful foods of summer and autumn into rich deposits of stored fat. A thick, insulative subcutaneous fat layer forms rapidly on their backs and flanks, then more fat is deposited under the skin of the belly and within the abdominal cavity, garlanding the organs and viscera with a rich energy reserve to draw on during the long winter ahead.

When the leaves have dropped and the snow starts to fly, deer in temperate regions begin to make their way to traditional overwintering areas called deer yards. Typified by an abundance of coniferous cover, northern deer yards provide winter shelter during periods of deep snow and inclement weather. Winter is a time of tradeoffs for northern deer — the dual requirements of adequate food and suitable cover must be met. But since deer yards may only represent a small proportion of the total potential summer range, the resulting winter concentration of deer frequently causes the severe depletion of food resources. Gone are the nutrient-rich herbs and forages of summer. Succulent new twig growth hardens and lignifies. The leaves of the trees and shrubs wither and drop, and the nuts and acorns fall to the ground and are covered by snow. Little remains except for the barren twigs of deciduous trees and shrubs, and the fronds and needles of the evergreens. It is this meager winter browse, along with the all-important stored fat reserves, that sustain northern deer through the long months of winter. Food and cover are the two crucial arbiters of survival, yet even these can be interrelated in an ironically antagonistic fashion: some excellent cover species, such as eastern white cedar, are also highly desirable browse species, avidly consumed by the deer whenever accessible. When deer populations are high, the young trees and the lower branches of the mature trees are stripped bare of

green cedar fronds, to a height in excess of two meters above the ground (or higher, if the snow crusts over and can support a hungry deer rearing up on its hind legs to feed). Excessive browsing pressure kills the young trees, and the lower branches of older trees seldom regenerate, resulting in a sharply-defined "browse line" below which there isn't a trace of green to be found. In extreme circumstances, the deer literally eat themselves out of house and home.

Coping with the Big Chill — Adaptations to Winter

A series of profound physiological changes occur in whitetails with the onset of winter. Triggered by shorter day length and prolonged stretches of cold weather, metabolic rates change substantially. Above the freezing point, deer require about 1,140 calories of metabolizable energy per day for every 50 kg of body weight. As temperatures drop, most warm-blooded animals respond by increasing their metabolic rate, using more and more energy to maintain a stable body temperature (my shivering on the hillside while making my first deer observations was just such a response). After an acclimatization period, however, northern deer exhibit a profoundly different physiological reaction: instead of increasing their metabolic rate as the temperature drops below freezing, their basal metabolism actually decreases to a level far lower than the normal warm-weather rate. Endocrine glands — the thyroid, pituitary, and adrenals — are reduced to their smallest and least active state at this point in the year. Summer pelage is replaced by a highly insulative winter coat, comprised of a dense layer of fine underfur and an outer layer of long, kinky, porous guard hairs. Behaviour is affected, too — deer voluntarily restrict their food intake, and long periods are spent resting in the shelter of the dense conifer stands of the deer yard. Movements are kept to a minimum to conserve vital energy stores. Food is scarce in the wintertime and of low quality when compared to what is available during the rest of the year. As a result, deer steadily lose weight throughout the yarding season due to the continuous depletion of their fat reserves. This weight loss would occur, albeit more slowly, even if deer were provided with

an endless supply of the best-quality, most energy-rich natural winter diet; once physiologically adapted to sub-freezing temperatures, they are incapable of metabolizing natural food-stuffs at a rate sufficient to offset weight loss.

Yet food is still vitally important to deer in winter. Obviously, they cannot subsist indefinitely on stored fat; eventually body reserves will be depleted to the point that the animals will starve to death. During winters of exceptional length or severity, with extended periods of very cold weather and deep snow, high mortality rates are common in northern deer populations. Fat depletion continues to the point where virtually all subcutaneous and visceral stores are used up. The terminal phase of starvation occurs when the fatty tissues of the bone marrow are catabolized, and muscle tissue begins to be broken down; death at this stage is almost inevitable. Normally pale pink and firm, the fat-depleted bone marrow of a deer that has died of starvation is fluid and deep red in colour.

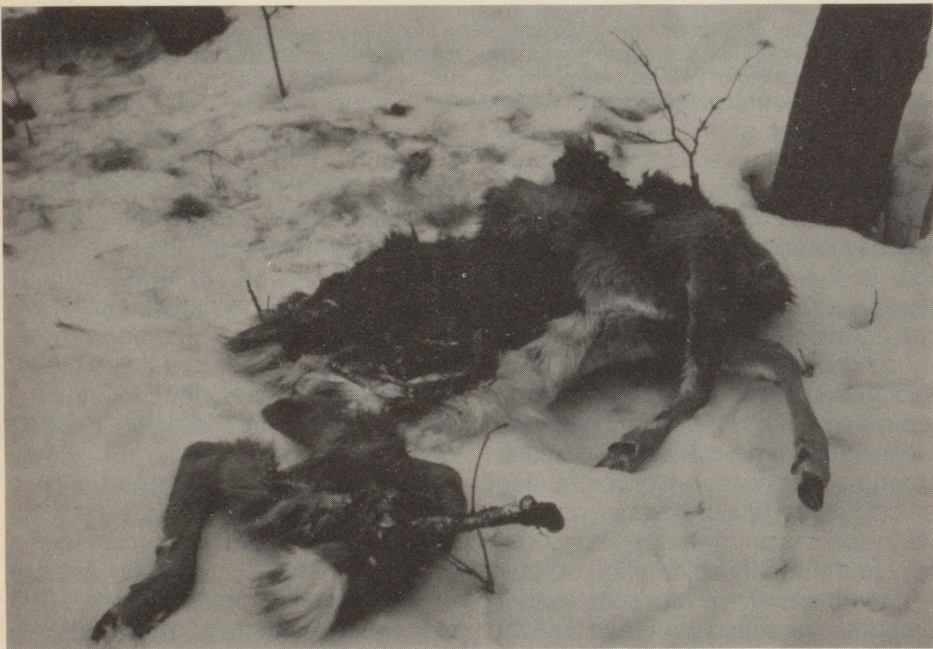
Although winter browse intake cannot compensate completely for fat depletion, the energy and nutrients ingested in the winter twig diet slow down the rate at which deer use up their vitally important fat stores, hopefully conserving them enough to see the deer through into the next spring. Then, when metabolic rates return to warm-weather levels, spring greenup provides them with new, nutritious foodstuffs to rebuild their depleted bodies.

Foraging Strategies — Evolutionary Adaptations for Survival

Researchers who study foraging behaviour are intrigued with the patterns of resource accrual employed by animals. Speaking in evolutionary terms, one would expect that the pressures of natural selection would result in animals which forage efficiently, optimizing the energy and nutrient return in their diets by selectively foraging on the most profitable food items. Evolutionary ecologists can thus generate testable hypotheses about what food types should be included in an animal's diet, what foraging patterns are followed when animals are faced with patchily-distributed diet items, how much time should be spent searching for various food types, and



Though tedious and time-consuming, the periodic monitoring of deer browsing behaviour in vegetation sample plots provides valuable data to assess foraging patterns. Photo: G.J. Doucet.



Weakened by starvation and hampered in her movements by deep snow, this deer was easy prey for free-running domestic dogs. Photo D.T. Brown.

so on. The new perspectives of optimal foraging theory provide researchers with a fresh approach to the study of foraging behaviour. Much of my thesis research to date has been concerned with this topic in an attempt to elucidate some of the underlying mechanisms and strategies employed by foraging deer in the restricted confines of a winter yard.

The initial interest in the winter foraging of deer was a purely pragmatic one. Game managers were interested in determining the food

requirements of the animals on their winter range with the goal of improving management techniques. Concerns such as the avoidance of overbrowsing and the determination of carrying capacities and harvestable animal surpluses were paramount. As such, an enormous body of literature has arisen dealing with techniques and methods of monitoring and managing deer populations through winter forage.

By and large, however, the actual temporal and spatial mechanisms of

food selection have been ignored. Researchers have concentrated upon looking at the *average* food utilization within a given habitat by establishing random transects or sample plots at a few critical points in the year. For example, it is a common practice to estimate the gross browse availability in a given deer yard by sampling the area in late autumn, just before yarding occurs. Also, it is common practice to sample the yard again in early spring, just after dispersal, to estimate the amount and species composition of the browse eaten by the deer that season. The data obtained in this manner indicate gross trends in browse utilization, but the researcher interested in the actual mechanism of foraging behavior requires better resolution.

Ideally, to investigate foraging in detail, the researcher should follow the animal about, recording its foraging path, the amount, type, and relative proportion of food types ingested, the metabolic utilization of the food, the losses due to thermoregulation, excretion, and so on. Obviously, the practical problems are large and complex, and so the challenges of the optimality perspective have gone largely unanswered. Comparatively few studies have tested the validity of the optimality concepts in an experimental manner. Still fewer of these studies have taken place in the field, under natural conditions. For many species, it is extremely difficult to maintain the required degree of control over a field setup to allow the derivation of any meaningful conclusions from the data collected.

Still, if optimization is as central to behavioral processes as the optimality gurus maintain, we would expect animals to behave in a way which at least *approximates* an optimal manner. Presumably, some evidence of these optimal tendencies will be discernible to the experimenter, if the proper experimental approach is employed.

In many ways, the white-tailed deer is an excellent species to use in an investigation of foraging behaviour in the natural environment. In northern yards, deer are limited to a finite, quantifiable food resource base (woody browse) which is not subject to renewal within a given season. They: a) leave behind clear signs of their feeding activity in the form of ragged browsed twigs; b) have a restricted

and identifiable winter range; c) can be tracked with reasonable success in the snow. Also, their general ecology and habits are well-suited, albeit from a different perspective.

Some Experimental Approaches

Many of the general predictions arising from current foraging theory can be evaluated experimentally in the context of a winter deer yard. Take, for example, the question of diet breadth. When winter browse levels are at their highest, at the beginning of the yarding season, we would expect overwintering deer to be fairly selective in their choice of diet items, choosing only a few preferred browse species to feed on. All the while that these species are relatively abundant in the yard, deer will continue to utilize them, ignoring other less profitable species. However, as the preferred species become depleted, we would expect the deer to expand their diets to include other, less profitable browse species, simply because the overall food availability in the yard has decreased.

Experimental evidence indicates that this is indeed the case. Figure 1 shows the number of different browse species taken by deer in the study area over the winter of 1983/84. It is clear from the cumulative totals that diet expansion occurred: from four species at the beginning of the winter, deer eventually came to include 16 species in their diet by the end of the winter, consistent with the theoretical expectations. The highest number of previously unbrowsed new species added to the diet came toward the end of the yarding season, when browse was scarcest.

Deer have been widely described as "diet generalists," feeding quite non-selectively on whatever twigs happen to be available. If that were indeed the case, we'd expect the proportions of various twig species in their diet to be roughly equal to the proportions that these twigs exhibit in the foraging area. It is common management practice to establish random transects in deer yards in the springtime to assess relative browse use and availability, and many of these studies do little to refute the concept of deer as generalist feeders. The results of such a "one-shot" approach, however, are overall seasonal averages, telling nothing about the changes in preference that

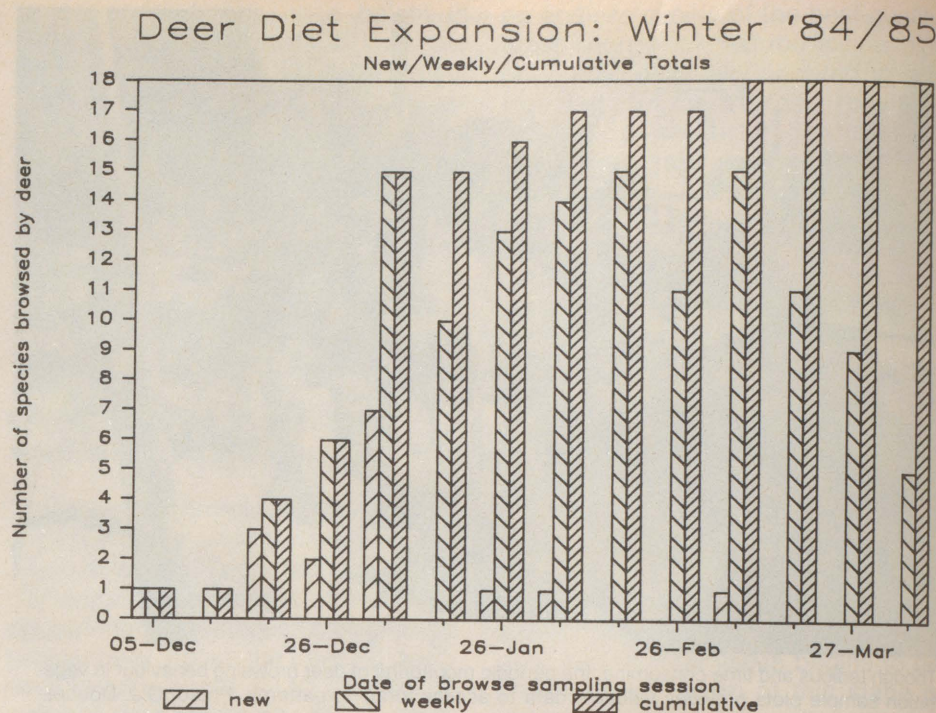


Figure 1: Number of different browse species taken by deer in Rigaud over a typical winter. First bar in each cluster indicates the number of new, hitherto unbrowsed species added to diet; 2nd bar lists total number of species browsed during previous two-week period; 3rd bar indicates the cumulative number of species present in the diet.

might have occurred over the course of the winter. We noticed some apparent trends in browse utilization which led us to doubt that deer were so random in their choice of diet as was generally believed, so we set out to look at things a little more closely.

The browse — monitoring methodology used in this study facilitated the accurate weekly determination of relative twig use and availability in each experimental browse patch, permitting the calculation of a preference ratio for every species on a weekly basis. Contrary to the widely-held notion of deer as generalists, there was quite a bit of temporal variation in these ratios; moreover, they followed a pattern of changing preferences which was consistent through each of the three winters when these data were collected. These trends can be interpreted as direct evidence of a foraging strategy in operation, where deer are choosing alternate diet items in a gradually-changing, yet predictable, pattern. This selective response in the face of decreasing food availability raises many interesting questions as to what factors mediate these switches of diet, why certain species are favoured or avoided, and at what threshold levels the diet composition changes.

Another prediction arising from current foraging theory is that animals tend to forage preferentially in the densest patches of their food resource. In the case of white-tailed deer, we would predict that: a) deer will tend to take a greater number of twigs from browse patches with a higher twig density, and b) deer will make a greater number of foraging visits to denser browse patches.

By examining the relationship between the number of twigs available and the number of twigs browsed in a series of naturally-occurring browse patches, and by monitoring deer visits to the patches through track counts in the snow, we were able to test these predictions experimentally. As expected, there was a statistically significant increasing trend in the number of twigs browsed by deer as twig availability in the patch increases. Additionally, by calculating the mean number of twigs available in patches that had received a given number of browsing visits, the second prediction was supported: deer make a greater number of foraging visits to denser browse patches. Simple findings — but important to our perceptions of their behaviour!

These few brief examples indicate, very sketchily, some of the experimen-

tal approaches used to better understand the patterns and mechanisms of winter foraging behaviour in deer. Numerous other aspects of winter foraging are currently being investigated, hopefully shedding light on both the theoretical questions of animal foraging and the more practical concerns of deer management. Of course, every finding, however small, generates a spate of new questions to answer, and the bewildering complexity of the natural environment presents a new challenge to our understanding at every turn. Yet there is immense satisfaction in addressing some of the "very small big questions" that the disciplines of natural history and evolutionary ecology so liberally provide. It is the job of the wildlife biologist to remove some of the mystery of animal behaviour — but, fortunately, no one is able to remove the wonder.



Dave Brown, left, and Steve Tinker discuss Steve's artwork for the cover of this month's Journal.

The Author and the Artist

The article "Of Deer and Diets" has been in the idea file for some time, and I'm delighted to see it in print in this issue. Of particular delight is the opportunity it affords to share artist Steve Tinker's work with you. Thank you, Steve, for the cover. We are fortunate to have a person of his talents on campus who is interested in the Journal. As Dave Brown said, "Steve is very humble about his abilities, but he has exceptional talent and his work speaks for itself."

As both author and artist are in Wildlife, Dave has had ample opportunity to see Steve's work since he came to Macdonald in 1977. From Laval, Dave did his BSc ('80) in environmental biology, but it was his summer jobs that convinced him that one could actually get a job working with plants and wildlife. Two summers were spent looking at the distribution of high bush blueberries; the other for a lake study where "I got paid for fishing all day!" Next Hydro Quebec through Dr. G.J. Doucet asked him to work on a two-year study on the effects of power line corridors on white-tailed deer behaviour. "I got really excited about white-tailed deer research and, as a result," Dave said, "I decided to work on a Masters program." Dave started his research on behaviour — the deers' agonistic interactions over limited food supplies, as an example, but he changed

emphasis in his second year and streamed directly from the Masters into a PhD program. He now has three years of accumulated data which are at the analytical and writing stage. Once done, what next? David Brown sees an interesting future in research and teaching, both of which he enjoys.

Originally from Lachine, Steve Tinker first came to Macdonald in '69 to work on a CEGEP program. He switched instead to fine arts but then decided "to give science one more chance!" His BSc in '76 was in general wildlife management with some entomology. His MSc in '81 was on crop damage by blackbirds. Readers may well remember his excel-

lent artwork on our March 1976 Journal. Next Steve went West to Manitoba and worked with Fisheries and Oceans for two years studying whales in the arctic. An easterner at heart, Steve returned in 1982 and worked on preliminary plans for the St. Lawrence Valley ecomuseum. He has since returned to Macdonald as a technician in Wildlife and, although a career in art appeals to him, he still enjoys the diversity of life at Macdonald. Meanwhile his art has appeared twice in the Manitoba Society of Artists' shows and he won three awards at one of them. He has also appeared in the Canadian Nature Federation Natural Museum Cross Canada exhibit, and we hope to feature his work again in the Journal.

COLLEGE ROYAL

Mark February 6-8, 1987, on your calendar for the annual Macdonald College Royal and Livestock Show, and remember, too, that this will be an excellent chance to explore the new dairy complex.

The Livestock Show

As the show ring cannot be used this year, there will be no competitions; however, the Livestock Club is planning a host of activities that will take place in the new complex. Animal grooming and preparation, halter making, and other demonstrations and displays will prove worthy of a visit.

Intercollegiate Judging Competition

This event has been condensed to one day: Saturday, February 7, from 8:00 a.m. to approximately 1:30 p.m. Teams will be invited from the United States, the Maritimes, Ontario, and Quebec.

An awards banquet and dance will conclude the day.

Exhibits

Departments and organizations will have their displays set up throughout the three days from 10:00 a.m. to 6:00 p.m. daily.

Hungarians Exchange Visits with Macdonald

In March 1986, on the invitation of McGill International and with Agriculture Canada support, a group of eight Hungarians spent eight days in south-western Quebec and Ottawa. This visit followed a trip to Hungary by Dr. Eugene Donefer in November 1985.

The group included the directors of the six regional Animal Breeding Companies, their Director General, Dr. Janos Pek, Dr. Janos Dohy, Professor of Animal Breeding at the Agriculture University of Godollo and Mr. Gyonyor, commercial officer, of the Canadian Embassy in Budapest. These directors are in charge of artificial insemination, embryo transfer, and recording programs for farm livestock in Hungary. They have recently obtained approval of a loan from the World Bank for the development of livestock production. Their interest at Macdonald College was in the Dairy Herd Analysis Service (DHAS) program and possibilities of exchanges with the Department of Animal Science.

The first and last two days of the visit and discussions were with the Department of Animal Science, DHAS, and the Macdonald Farm. One day was spent in Ottawa with Agriculture Canada. Other visits included Agropur in Granby, the Quebec Artificial Insemination Centre (CIAQ), and the new embryo transfer unit in St-Hyacinthe. Three DHAS herds were also visited. This included Tolhurst Farms in Howick.

Hungary has imported a considerable amount of breeding stock, semen, and embryos from Canada in recent years. There has been considerable improvement in milk production per cow over the past 10 years.

Drs. Bruce Downey and John Moxley with John Brohan a former DHAS program manager spent 10 days in July on a return visit to Hungary. This included a visit to the University of Agricultural Sciences and five of the six agricultural regions of the country. The tour included state farms with Canadian connections involving poultry, dairy cattle, beef cattle, and registered cereal stocks. The visits also included Artificial Insemination



Norman Campbell with the Hungarian group on a tour of DHAS. Professor Dohy is second from the left while the delegation leader, Dr. Pek is sixth from the left.



Brian Corrigan, lab manager, explaining the laboratory operations to the Hungarian group.

Centres, their embryo transfer centre, cattle and swine testing units, centres for retaining animal gene pools, horse breeding centres, and milk and meat processing plants.

Our hosts very generous hospitality included a good survey of their wine centres. The Canadian Holstein has played a prominent role in the progress they have made in the dairy industry. The first use of frozen semen and embryo transfer was from Canadian imports. Their recent progress in crop

yields places them near the top in European standards. Some reorganization has taken place in order to encourage more rapid progress in the agricultural sector.

John Moxley made a short two-day return visit in September during which he had an opportunity to see the western part of Hungary. This trip included a tour of a cooperative farm which purchased 590 Holstein heifers from Quebec in the late 1970s as a base for a dairy herd.

Seeking Solutions

by Dr. Robin K. Stewart
Associate Dean, Research

In spite of our general paucity of research funding for science, a number of Macdonald staff have obtained funding for new projects this year. We thought we would highlight the new projects in the Department of Plant Science, which have been funded by the Conseil de Recherches et Services Agricoles du Québec (CRSAQ).

Dr. Bruce Coulman plans to breed new cultivars of red clover with the goal of increasing the quantity and quality of forage produced in Quebec. Specific objectives include: selection of cultivars with greater resistance to virus diseases and *Fusarium* root and crown rot; selection of variants from regenerated callus cultures; and the production of high yielding cultivars through recurrent selection proce-

dures.

Dr. Coulman has also obtained support for a project aimed at determining the critical period during which alfalfa must be left unharvested prior to winter frost. If alfalfa is not allowed sufficient time to store carbohydrates in the root prior to frost, the cold hardiness of the plant is reduced. Dr. Coulman's project should allow precise recommendations for last cutting dates for different regions of Quebec.

Dr. Rick Reeleder will be attempting to reduce losses of stored carrots to rot, especially that caused by *Sclerotinia*. It has been estimated that Quebec carrot growers may lose up to \$2 million in some years to these diseases and Dr. Reeleder believes that the use of appropriate fungicides in the field, prior to harvest, will greatly reduce these losses. In co-operation with Dr. V. Raghavan of the Agricultural Engineering Department he is also examining the potential of modified atmospheres for control of these diseases in storage.

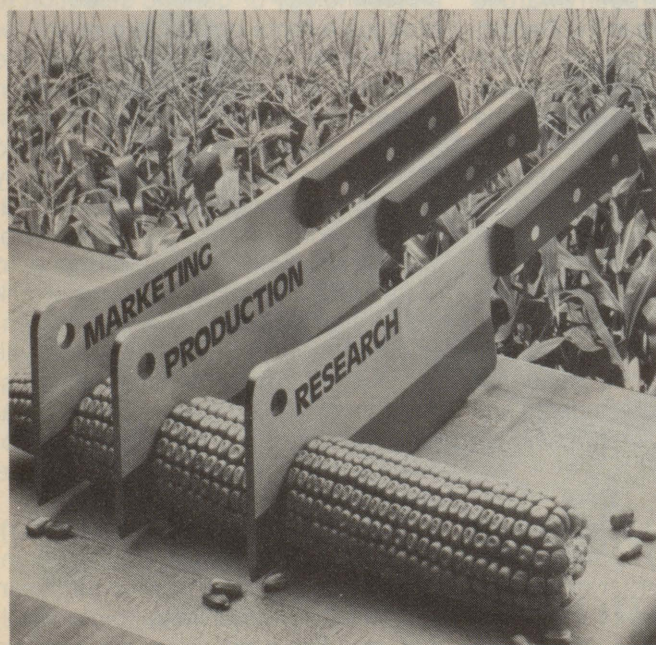
Dr. Reeleder has another new project underway, this time looking at dis-

eases of bean and other crops. He is attempting to use biological control agents to help reduce losses due to these diseases. To achieve this, he and his students are producing fungicide-tolerant strains of these biological control agents (fungi and yeasts). These new strains will be combined to fungicides to determine if they will increase disease control. Effective strains may enable growers to reduce the amount of costly fungicides applied to their crops.

Finally Dr. Alan Watson has obtained new funding for his ongoing program in the development of biological herbicides. This project addresses fungal pathogens which have been isolated from common hemp nettle (*Galeopsis tetrahit*) and lambs quarters (*Chenopodium album*) and the thrust of the current research will be to determine optimum culture conditions for maximum spore production and disease development and to determine the host range of the pathogens.

All going well we will report on new activities of other departments in future issues.

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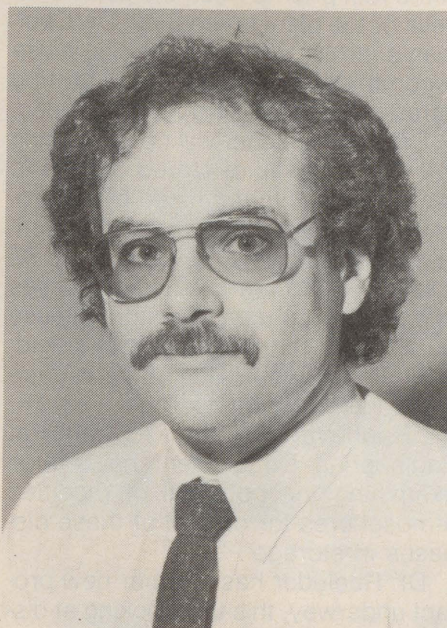
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DR. ELLIOT BLOCK:

Young Scientist Award Recipient

In July, 1986, Dr. Elliot Block of the Department of Animal Science won the Young Scientist Award given by the Canadian Society of Animal Science and sponsored by Co-Op Feeds. The award is given to scientists who have shown that they excel in animal science and have had their Ph.D degree for less than 10 years.

Dr. Block obtained his Associate of Applied Science degree in 1973 from the State University of New York, his B.Sc. from Cornell University in 1975, and his M.Sc. (1978) and Ph.D. in 1980 from the Pennsylvania State University. In 1980 Dr. Block came to Macdonald College as an Assistant Professor of Animal Science; in 1983 he was named as an Associate Member of the Faculty of Medicine, and in 1986 was promoted to the rank of Associate Professor.



Elliot Block

manuscripts in scientific journals, 33 abstracts, 28 research reports, 9 invited presentations and symposia, 33 articles in the popular press, and has given 27 talks at dairy producer meetings in Canada and the U.S.A. In addition, he has given short courses to farmers, veterinarians, and sales personnel.

Within the McGill Community, Dr. Block serves on eight committees, teaches the equivalent of 2-3/4 courses at the undergraduate and post-graduate levels, is directing eight post-graduate students at the M.Sc. and Ph.D. levels, and is an undergraduate student advisor.

In addition, Dr. Block consults with various farmers and private companies and has been involved in international consulting in Trinidad, Jamaica, Pakistan, Brazil, and Argentina.

Varied Research

Dr. Block's research program has been varied. He has extensively elucidated on epidemiology and control of subclinical parasitism in dairy cattle, identified new and innovative techniques to control milk fever in dairy cattle, identified how to effectively use buffers in dairy rations, elucidated on the relationships of dietary beta-carotene with reproduction of dairy cattle, determined the benefits of heat-treated soybeans for dairy cattle feeding, begun to determine the role of forage protein quality in relation to voluntary feed consumption, begun to determine the role of amino acids escaping rumen degradation in overall nutrition of cattle, begun a program on the effect of treating various silages, and recently began a large program on the use of somatotropin for dairy cattle. Dr. Block has been able to obtain in excess of \$180,000/year in research support from the public and private sectors.

Publishing and Committees

In his six years at Macdonald College Dr. Block has published 16

Animal Science Team Recipient of Major Grant in Dairy Biotechnology

A grant of \$864,000 has been awarded to a team of researchers in the Department of Animal Science for multidisciplinary research in Dairy Science. Spread over a five-year period, the grant is one of several given in Quebec under the "Programme d'actions structurantes" du Ministère de l'Enseignement Supérieur et de la Science. It will facilitate the hiring of three Research Associates, one each in the areas of quantitative genetics, protein biochemistry, and molecular biology. In addition to the Research Associates, five graduate students and three technical/clerical staff will be supported on the grant.

Using recombinant DNA techniques, the team plans to identify, clone, and ultimately transfer the genes responsible for transmitting desirable casein proteins in milk. By these means, milk quality (both fat and protein) can be modified through either

biotechnology or genetic selection to produce a more desirable product for a particular market. For example, the presence of a particular combination of proteins renders milk more appropriate for cheese making. A second thrust of the research involves a study of the consequences of the administration of somatotropin, a biotechnologically-produced natural hormone, to dairy cows. Estimated to improve milk production a remarkable 20 per cent on average, the use of the product will be studied from various aspects, including the animals' nutritional requirements and subsequent reproductive performance as well as the effect on milk quality.

Drs. Ng Kwai Hang (Co-ordinator), Block, Cue, Downey, Hayes, and Kühnlein, who collectively have expertise in biochemistry, physiology, biotechnology, and data processing, are involved in the project.

Dairy Nutrition Information Centre

A national information centre aimed at providing up-to-date, factual information on dairy products and human health has been established in Montreal by the Dairy Bureau of Canada.

The Dairy Nutrition Information

Centre will act as a communications and reference centre with specific emphasis upon the media, the medical and paramedical communities. The information centre's main objectives are:

- to communicate the latest scientific and clinical research concerning dairy products and health;
- to foster greater awareness of the specific health benefits of dairy foods;
- to develop a central data bank of reference relative to dairy nutrition and health;
- to encourage consumption of dairy products in a normal, healthy lifestyle for Canadians of all ages.

Challenges to cope with

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Chairman of the new centre is **DR. M.A. (VIC) AMER**, PhD '71, Auxiliary Professor of the Department of Agricultural Chemistry and Food Science at Macdonald College and a Senior Vice-President of the Dairy Bureau of Canada. Dr. Amer chairs an Advisory Board of 10 leading medical and scientific authorities from Canada and the United States, including **DR. MARY G. ALTON-MACKEY**, Associate Professor in the School of Dietetics and Human Nutrition.

"We felt the growing public concern with nutrition and confusion surrounding the benefits of dairy foods could best be serviced through a national centre of this type," commented Dr. Amer. "We are fortunate in having the active cooperation of some of North America's foremost authorities in nutrition and health."

Initial priority at the Dairy Nutrition Information Centre will be to make Canadians more aware of current research taking place around the world. "For several decades, our competition has managed to convince consumers to avoid dairy products because of cholesterol or calories," explained Dr. Amer. "But independent research has reversed this completely. There may be far greater danger to health from artificial products in this market. Our job is to make the facts known."

Prior to its formal creation, the DNIC organized the first International Symposium on Calcium and Human Health in Montreal earlier this year. A similar symposium was scheduled for Vancouver in October. The symposium demonstrates the benefits of calcium in preventing osteoporosis, hypertension, colon cancer and coronary heart disease and has identified milk as the most natural and efficient source of calcium. The Montreal Symposium resulted in over 160,000 requests for more information on dairy calcium.

WHAT'S FOR LUNCH?

Introduction by Hazel M. Clarke

A mother of two grown children, who have left home and started lives of their own, still maintains that the hardest thing she found in life was making school lunches — that the kids would find interesting enough to eat. She put notes in the lunch boxes, drew happy faces with coloured candies on the sandwiches, and made animals out of pickles and olives. Is the lunch you pack the one your child will eat, or will it be traded for peanut butter and jelly on brown "cause, mummy, that's the sandwich I like best in the whole world — every single day!"

To find out more about the noontime eating habits of today's youngsters, what mothers were packing in lunch boxes, and if they needed help in planning menus that would be nutritious as well as appealing, one of the 30 Challenge '86 Summer Employment grants given by the federal Department of Employment and Immigration to Macdonald College, allowed three Dietetics students in the School of Dietetics and Human Nutrition: Catherine Atchison, Louise de Courval, and Monique Pagé, under the guidance of Professor Shirley Weber, to study the lunch box habits of 142 students at four schools in the Greater Montreal area. As some of the mothers might be packing lunches for the first time, the study concentrated on 354 lunch boxes belonging to students in the extended kindergarten classes at Edinburg, Beechwood, Dunrae Gardens, and Gardenvue schools.

The findings from the study as well as suggested menus for lunches and for snacks (as snacks are also important in a child's eating habits), sandwich fillings, and other hints have been printed in a bilingual pamphlet entitled "The Lunch Box Project" and make for interesting reading.

The contents of the lunch boxes were evaluated on the basis of the Quebec Food Guide which recommends that at least one food from each of the four food groups — breads and cereals, meats and alternates, fruits and vegetables, and milk and milk products — should be included in the lunch and snack box.

Of interest is that in the three schools in the study that had ended



Examining a typical lunch box are, l to r, Louise de Courval, Catherine Atchison, and Monique Pagé, Dietetic students in the School of Dietetics and Human Nutrition.

their Milk Program for the year the Dietetics students found that only 29 per cent of the lunches and snacks in those schools had a serving of either milk or a milk product. Where the program was still operating, 91 per cent of the lunches and snacks had at least one serving from that group.

"This finding," Professor Weber said, "is an indication of the importance of the milk program in ensuring that children receive at least 200 ml of milk each day."

Considering the notoriety that Quebecers have for their sweet tooth, another statistic that interested Professor Weber was that only 56 per cent of the lunch boxes contained sweetened items which provide calories but little nutritional value.

Two of the Dietetics students, Louise de Courval and Monique Pagé, both from Montreal, worked on the project at the start: they set up the initial proposal and organized how the data would be collected and analyzed. "I went to the schools," Monique told me, "and checked the lunch boxes to see what the children were bringing to eat. We analyzed the contents of the lunch boxes in terms of what foods were in the boxes, the nutrient content and, based on what we found, we made recommendations and prepared the pamphlet for the parents."

"As I had another commitment, Louise de Courval said, "I was only involved in the beginning of the project. I helped collect the data and convert the information to computer language. It was very interesting. I thought for the

most part that, except for vegetables, the lunch boxes were meeting the Food Guide, particularly where there was a Milk Program in the school."

"It was a good summer project and I would recommend something similar to any Dietetics or Nutrition student," said Catherine Atchison, who came from Vancouver to study Dietetics at Macdonald, "I came into the project after all the data had been collected so I was involved in the analysis, writing it all up, and producing the pamphlet. I was also surprised by some of the data. The children ate better than I thought they would. There was a lot of fruit, and that was one thing I hadn't expected. The response we have had indicates that it has been most worthwhile. I think we have answered some of the questions about packing lunches that parents have had in the past."

The students obviously enjoyed the project, as did Professor Weber: "I think the most exciting part of the project for the students and for me was that the idea came from the community — the Home and School Association — and we were able to pick it up, collect the data in about six weeks, work on the data for another six weeks, and develop a tool that could be sent back into the community. It was a project that had a definite beginning and, for the schools, it had an ending as well. The first day that those children who had participated in the study in May and June were back at school, they could take the pamphlet home to their parents. Our students, therefore,

(Continued on page 27)

QWI

Freer Trade Seminar at Macdonald

With the support of the FWIC and the cooperation of some of the staff at Macdonald College, the Quebec Women's Institutes is sponsoring a one-day seminar on "The Effects of Freer Trade on the Agricultural Economy of Quebec" on Thursday, November 27, 1986, at Macdonald College. We hope to see you at Mac on the 27th. For complete details on the Seminar, please turn to page 11.

75th Anniversary Picnic

by Darleen Sabetta and Barbara Harvey

"Rain, rain go away, come again another day" might have been on the lips of some 300 Women's Institute members and guests on July 26 in Dunham, Quebec. Warmly welcomed were the Institute husbands who came and participated with their wives.

No one seemed to mind though as while the wet stuff descended lightly from the skies during the morning, they took the opportunity after registering at the Jeunesse de Mission Hall, where the festivities were to be held, to stroll through town to visit Best Hall and the Cairn and to browse through the Anglican Church which had been built in 1847.

At the Mission Hall, the crowd mingled in and around various interesting displays: there were crafts, a sale table, and the Historical Society table. Guests admired the Friendship Quilt which Mary Harvey had instigated as a special 75th year project of Missisquoi County and also on display was a lovely quilt of embroidered birds which South Bolton members had made.

Following a delicious and bountiful picnic outside on the grounds as the showers had lightened, Pearle Yates, on behalf of Brome and Missisquoi

EXECUTIVE CORNER

Congratulations and many thanks to Pearle Yates and all the ladies of Brome and Missisquoi for giving us such a wonderful picnic. The ladies serving lunch may have got wet, but the rain did not dampen their spirits nor take away their smiles. There was a camaraderie that was a joy to be part of. Many long hours of preparation and hard work were evident in the displays, lunch, tours, and entertainment. As tired as we know the ladies were, they smiled until the last one of us had gone. Thank you girls for a job well done — you should still be smiling!

Cead Mile Failte (a hundred thousand welcomes)

This greeting from smiling Irish country women who met us at the airport in Ireland for the ACWW Conference will always be remembered. We heard it repeated many times during our stay. It was a proud moment for all the Quebec delegates when the announcement came that Yolande Calvé was the new Area President for Canada. Then another Canadian, Dr. Irene Spry was made a Member of Honour, and, of course, our own Dr. Ellen McLean stays on as World President.

The seminars all had excellent speakers and created good discussion: 1. rural women as entrepreneurs, producers, managers; 2. family heritage, problems of one-parent family and shared responsibility; 3. family environment covering housing, health, education, economic security, and culture; 4. technology and tools in the areas of energy and agriculture (food and water). The business sessions were all interesting. In the publicity and publications meeting I thought of our editor, Hazel Clarke, while listening to the editor of "The Country Woman" telling how she tries to keep readers happy from 300 societies in 60 different countries. It became evident that it was not an impossible task as we are all working towards the same goals to have better homes and living conditions for our families in a peaceful world.

Lucy French
QWI President

Counties, welcomed everyone for the start of the afternoon's program. Jane Greig, Missisquoi County President, said a special hello and hoped that everyone would be able to take home some happy memories. Ola Carr, Brome County President, thanked everyone for coming and wished them a good time. Lucy French, Provincial President, extended warm greetings, and messages of congratulations were read from Mayor Pierre Bernier and his wife, from Honourable Benoit Bouchard, and from Sheila Washer who were unable to attend, and from the Magdalen Islands W.I.

A special guest was Madame Gabriel Bertrand, MP for Brome Missisquoi. Mme Bertrand welcomed everyone to Brome and Missisquoi counties and stated that we should be very proud of our WI work.

As the ladies had been asked to wear period costume and many were able to do so, individuals were asked to come forward and provide some information on their dress. The oldest gown was a 1909 wedding dress, there was a 1910 lawn dress, and many other very beautiful gowns which

represented the years around 1911. All who took the time and endured wearing them for the day, as humid as it was, should be commended for doing so.

Verna Patterson recited a poem that she had written, which was enjoyable. Flora Richard presented a short resume of the QWI history in her usual quiet, humorous, and sincere manner.

Audrey Barker and Majorie Berard were the judges for the hand-made parasol competition. Honourable Mention went to Marianne Enright, Granby Hill; 1st: Sylvia Hopps, Austin; 2nd: Flora Richard, Stanbridge East; 3rd: Jeannine Lussier, Granby West.

A cookbook, brought back from Ireland by Lucy French, was auctioned and Agnes Keenan placed the winning bid.

A very special guest during the afternoon was our QWI founder's daughter, Ella Beach Brown, who was accompanied by her daughter and son, Betty Brown Monahand and George Brown. Mrs. Ella Brown and Mme Gabriel Bertrand were asked to cut the anniversary cake which had been beautifully decorated by Irene Williams



Cutting the Anniversary cake at the picnic were, l to r, Ella Beach Brown, daughter of the QWI founder, and Mme Gabriel Bertrand, MP for Brome-Missisquoi.

of Fordyce in the W.I. colours with the motto "For Home and Country" inscribed on top.

Members enjoyed the piano talents of Isabel Bradie of Cowansville just prior to the start of the afternoon program and of Barbara Harvey of Dunham when she played during the serving of the anniversary cake. Another musical interlude, which had everyone singing along or tapping their feet, was the singing talents of the Rev. Mary Gibson of Dunham as she sang a number of inspirational songs from the 1960s.

The Barbershop Quartet, The Valley Boys of the Yamaska Valley Chapter, thrilled the audience with such songs as "I'll Take You Home Again, Kathleen." Their contribution to the entertainment brought back many memories of that era. The afternoon closed with the singing of "Hymn of All Nations."

Some 150 partook of a buffet supper at 5:30 p.m. which consisted of a very tempting assortment of cold cuts, salads, and desserts.

Thelma Rhichard welcomed those who stayed on after the supper. She introduced Barbara Harvey and her daughter, Trudy. Trudy accompanied her mother on the piano with her guitar and they sang so well together. Barbara played several waltz selections

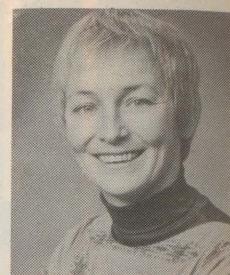
IN STITCHES

by M.E. Jennaway-Eaman, Faculty of Education

Congratulations to those of you who won prizes at EXPO '86. Next year's competition includes ladies slacks so here are a few timely suggestions.

Select a classic straight or gentle flared leg pattern rather than an extremely tapered style which is difficult to press and harder to display. Choose a bottom weight fabric such as a closely woven worsted flannel with at least a 50 per cent wool fibre content, or something similar which will demonstrate your sewing skills without fraying too much or showing every error. If you want to splurge, try Ultrasuede. Avoid fabrics which are difficult to press, or fray excessively. Stretchy knits and fleeces may be very comfortable, but do not necessarily catch a judge's eye. Similarly elasticized waist bands do not demonstrate as much skill as a correctly sewn zipper, plus a well positioned waist band with an appropriate fastening. If you have excellent skills, a hand-stitch buttonhole, or hooks and eyes sewn in place out of sight with buttonhole stitch make a good impression and may add bonus points. The zipper teeth must not show, and, although a side placement may be more traditional, a lap front gives a professional look. The crotch seam may be stitched twice for strength provided the two rows are on top of each other and look like one. Curved seams should be clipped and neatly re-inforced. Top stitching demonstrates extra skill and can increase eye appeal. Use interfacing where appropriate to give a crisper finish. Bulky seams at the waist should be graded to reduce bulk, and seam binding may be used at the hem, with neat hemming or herring bone stitch.

There should be no need to remind you of all the no-no's but, in case it has slipped your mind, **remember no loose ends.** At dart and seam beginnings and ends backstitch 4 or 5 stitches or stitch them back by hand, but **no knots please. Seams must be neatened.** Seam finishes vary with the fabric chosen, but haute couture often suggests binding raw edges or using a double stitched machine and fell seam with perfectly parallel stitching! Machine tension must be perfect and stitching should be even and well controlled. With so much advice you may now be completely discouraged or determined to be a prize-winner. I hope it's the latter.



Esther Cavanagh of Dewittville WI took these photos of members dressed in the styles of 1911.

and other lively tunes. Trudy rejoined her mother for "Put Your Hand in the Hand" and others. Barbara concluded their part of the entertainment with more piano selections, closing with "Smile the While," for which she had composed her own words.

Irene Williams of Fordyce kept everyone in stitches with her monologue about her fat boyfriend. Everyone wished she had come back for an encore.

Last, but certainly not least, Isabelle Beattie on the piano and Daisy Johnson accompanying her on the violin brought the evening to a very memorable end.

It is hoped that as everyone clapped their hands to the music throughout the day or had their feet tapping to the different beats, the entertainers realized the appreciation of their audience.

In all, a fun-filled day among friends, many thanks to Brome and Missisquoi counties.

The ACWW World Conference

The Associated Country Women of the World Conference in Killarney, Ireland in May 1986 was one of the most interesting and enlightening experiences of my life. It is hard to describe the feelings that overcome you when you realize you are part of this vast gathering of women from around the world — nearly 1,000 of them of whom over 250 are Canadian delegates.

The world president, Dr. Ellen McLean, as you know is a Canadian from Nova Scotia. As there were no nominations for president, she will continue in this capacity for the next trimester. She is an excellent speaker and told us how thrilled she was to see the flags of Canada and Denmark carried in side by side during the Opening and Dedication Ceremony in the beautiful St. Mary's Cathedral — her country and her roots. The procession of flags was a moving experience for us all and made us as WI members remember that for many of us our roots, too, are in faraway places.

Killarney is a beautiful city with a good shopping area. Our husbands took organized bus trips to nearby places of interest.

As a member of ACWW and a regular reader of "The Countrywoman," it was a delight to actually see people whose names I'd seen so often. One of these, Mary Howse, Honorary Treasurer, spoke on the financial position of ACWW. To run an organization on such a vast scale requires a great deal of money. The budget for the next trimester is in the neighbourhood of £70,000 — roughly \$140,000 Canadian. This money comes from all constituent societies through our donations. In our own QWI branches our Pennies for Friendship go for this worthwhile cause. Miss Howse made the suggestion that wherever possible we donate "pennies that do not jingle." I came away from the conference with this thought uppermost in my mind.

"ACWW is a marvelous association of 9 million women in over 60 countries. We must try to increase our donations — not by large donations but by a few extra cents or dollar bills — to keep it a viable society helping women and children around the world." If the head office hasn't enough money to function properly, these projects will disappear.

As a delegate from Quebec I was thrilled with the election of Mrs. Yolande Calvé of Le Cercle des Fermières to the position of Area President for Canada. She replaces the Hon. Martha Belish and like Martha will be an able representative for us on the ACWW council.

The Irish Countrywomen's Association were superb hostesses with much planned for our entertainment. So many different types of Irish culture were presented from musicals sung in Irish Gaelic, to children dancing their traditional dances. The Irish people have beautiful voices and sing unaccompanied, so different to our Canadian customs. My husband and I really enjoyed the Conference Club. It was a delight to see our QWI President Lucy French "dancing up a storm" with people from around the world.

Only four QWI members were able to attend this conference. Let us try for more delegates at the next one in Kansas City, U.S.A., in September 1989. But remember, you must be a contributing member of ACWW to be able to attend. You still have time to join. How about it!

**Eileen Colton,
Fort Coulonge WI**

Howick's "Come and Go Tea"

Despite rain showers on April 12, the Tea put on by Howick was tremendously successful as 111 members from the eight branches in the county congregated at the Howick Curling Club to be on-hand for the 75th celebration.

The Howick WI was organized on March 13, 1911. The President of this first group of women was Mrs. Alex Younie and a picture of her was hung among the very interesting displays of handicrafts and memorabilia. This year's President is Mrs. Grace Brown.

Members of the Chateaugay-Huntingdon Institutes were greeted at the door by the Howick ladies who invited them to either partake of their tea before strolling around the many different displays or later as they wished.

Mrs. Lucy French, QWI President, was able to attend and she contributed souvenir spoons and tea towels to the WI displays.

Mrs. Gladys Younie offered a very interesting display on the beekeeping business that she and her family own. She demonstrated how the honey was extracted from the hives and processed. Leslie Bonnor presided over a display on the merits of goat cheese. She also prepared and cooked a very delectable penny pancake served with a bit of goat cheese for the ladies to try. Rita Plaizer displayed her very skilful talents with a needle, her lovely soapstone carvings, and she demonstrated her skill in egg scratching, creating beautifully delicate pictures on the shells of goose eggs which have been boiled in onion skins to give them a lovely brown colour. Irene Moss showed the ladies how to tie different types of scarves so that they will complement any outfit.

There were also displays on items collected from other countries: New Zealand, Kenya, Australia, Britain, and Holland.

Memorabilia consisted of such items as the first minute book; old W.I. scrapbooks; numerous 1911 news events; pictures of the Adelaide Hoodless Home and the Erland Lee Home; as well as hats, school books, tatting, glassware, china, and lace. Janet Elliot and Isabel Templeton had several pieces of their woodworking on display also. As well, there were many very lovely quilts to see. Lillian Chislom's Log Cabin Star; Janet Elliot's Daffodil;

Evelyn Lamb's quilt, and the hanging quilt Memory made by the members themselves.

Florence Crawford delighted the guests by playing many different piano selections.

As they chose, the ladies could go upstairs to enjoy the tasty lunch of sandwich loaf, sweets, coffee, or tea which had been prepared by the Howick Curling Club ladies. The upstairs room was also "dressed up" as there were several dresses of different periods on display and flowers which had been donated by the Little Denmark Flower Shop.

Many thanks to the Howick W.I. for such a pleasant afternoon.

J. & P. Coats Competition 1986

1. Small crest, suitable for wearing apparel. Finished edge. Ready to be applied. Using J. & P. Coats Embroidery Thread.

2. Needlepoint chair seat cover. Stool or bench cover will also be accepted. Using J. & P. Coats Anchor Tapestry Wool. Pattern and background to be worked. Pattern and design optional.

3. Crocheted set of hot mats (2). Using J. & P. Coats Speed Cro-Sheen. Design, size and colour optional.

QWI Handicraft Competition 1986

1. Child's knitted cardigan, size 4-8. Yarn and pattern optional.

2. Casserole carrier, machine sewn, Material and pattern optional.

3. Patchwork Christmas Wreath. Material and pattern optional.

4. Lady's slacks. Style and material optional. Finishing suitable to material.

5. Barbecue cooking set, apron and mitts, machine sewn. Pattern and style optional.

Offray Ribbon Competition

A) 1 bridal ribbon rose bouquet (bride or flower girl bouquet);

B) 1 bridal headpiece — with ribbon roses (bride or flower girl);

C) 1 table flower arrangement — for any occasion;

D) 1 ribbon rose corsage;

One article only from any one member. Woven edge ribbon to be used; a maximum of 3 to 5 ribbon roses. Ribbon projects may be complemented by silk or dry flowers. Judging on quality of work, design, and overall appearance.

Quebec Textile Handicraft Competition, 1987

Weaving

1. Transparency to hang: technique: weft inlay on straight threading; warp and weft optional; not less than 50 cm in its smallest dimension.

Weaving and Make-up

2. Lady's pullover: technique and fibres optional; edgings — knitted.

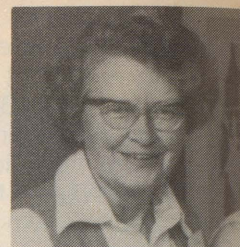
Sewing

SAFETY FIRST by Anne Robertson

WHAT TO DO IF AN ACCIDENT OCCURS Have phone numbers of doctor, ambulance, police, neighbours at the telephone. In an emergency valuable time is lost if you have to look up numbers. Have the number of your house clearly visible from the main road or at the road if the house is some distance away. Give clear instructions and the number so valuable time isn't wasted getting to your home.

If electrical, switch off power source. If a power line is down or someone is in contact with a live wire, don't try to pull them away. You will become a victim. Get help. A long, dry stick of wood handled by a person wearing rubber boots and gloves can be used to lift a live wire off a victim if no help is at hand.

If a finger or toe is amputated, apply pressure to wound to stop bleeding. Use sterile dressings if possible; if not, clean cloths. For the amputated part, wash in a sterile solution of 1 teaspoon salt to 1 gallon water. Wrap in sterile cloth soaked in clean solution — same strength as above — wrap in a clean towel wrung out of salt solution. Put all in a plastic bag and place in a cooler with crushed ice and transport to hospital immediately, at the same time as patient, if possible. Do not freeze amputated part.



3. Lady's slacks: style and material optional; finishing suitable for material.

Knitting

4. Child's cardigan — 4 to 8 years: technique, knitting; yarns and knitting.

5. Cushion: technique, knitting "filet crochet;" suitable thread; dimensions — 34 cm in its smallest measurement.

Fancywork

6. Girl's dress — 2 to 8 years: technique: embroidery "honeycomb"; suitable style and material.

For complete information on all competitions, please check at branch level.

County News

ARGENTEUIL: Arundel WI members named Ida Dubeau Woman of the Year and presented her with a nice scroll and a WI teaspoon. They are also giving eight dictionaries to eight graduating students. **Brownsburg** aided the local Midget Hockey team on their trip to Halifax. Milly Bates gave a most interesting demonstration on chair weaving. **Dalesville-Louisa** heard an interesting talk on the philosophy of the chiropractic approach from Dr. Berube, Chiropractor, who, with diagrams and drawings on a screen, pointed out how the nervous system controls and coordinates all organs and structures of the human body and with the chiropractic services no drugs are used as it is a drugless, knifeless, natural method of health care. **Frontier** heard a talk from Gary Cruise who was a former member of the municipal council. He explained the duties of the council and the many problems that arise. **Grenville** held an auction on plants, bulbs, and home cooking. **Jerusalem-Bethany** heard from J. Warbanks who spoke on Alliance Quebec and of their many accomplishments. **Pioneer** listened to an article on the opening of the Nora Beverages Plant. The water found in this area tested practically bacteria free and is equal to, if not better than, Ervan, one of the purest bottled waters in the world. The robotized facility will make its own plastic bottles which transfer neither taste nor chemicals to the water. Naya, the trademark of the bottle water will be sold on the U.S. market. **Upper Lachute East End** held a successful "Bring and Buy" sale.

BROME: Austin had an article in the *Record* on how the W.I. ladies of Austin are to be congratulated on their numerous humanitarian deeds.

South Bolton had an article in the *Record* on how a group of people got together to paint the old schoolhouse (W.I. South Bolton quarters), an "old fashion bee." **Sutton** heard a talk on how different kinds of wood were used in making bowls, plates and boxes.

COMPTON: Brookbury a member told of her trip to Australia. **Sawyer** held a successful Card Party and Salad Supper.

GATINEAU: Wright went to Chaffey Locks and had a boat ride up the Rideau.

MEGANTIC: Inverness extend a hint to make meals more nourishing, don't overcook vegetables and use the water drained from them in soups and gravy. **Kinnear's Mills** gave a donation to the Thetford Hospital Campaign.

PONTIAC: Beechgrove had a demonstration on flower making from bread dough, glue, food colouring and pipe cleaners. **Bristol** gave a donation to Avoca House, a refuge for battered wives and children. **Clarendon** were given a demonstration by the local physiotherapist and a demonstration by the local wool works. **Stark's Corners** had a speaker who spoke on colour analysis. **Wyman** had a 25 year pin presented to Mrs. E. Smith.

SHEFFORD: Granby Hill listened to an article on West German students visiting Canada and how they found that life can be very sweet when they are served sugar on snow (ice) by a family in Sawyer. **Granby West** heard that Hyundai is to build a car plant in Bromont and students at Ancastle High, just west of Hamilton, have created and exchanged tapes with students in Port au Prince, Haiti, that portray the life style of each country. **Waterloo Warden** heard that work may start again at the Asbestos Mines as both federal and provincial governments have promised financial help.

Darleen Sabetta,
QWI Publicity

saw a project from beginning to end, and I had the satisfaction of being asked to do something for the community and responding."

The Challenge '86 Project was obviously a success. If funding can be found, it is hoped that these pamphlets may be made available throughout the Quebec school system. A more detailed, enlarged study is also being considered. In the meantime, we are pleased to be able to reprint *The Lunch Box Project* for the benefit of our readers. Professor Weber and the students only wish that the pamphlet could be made available to even more young mothers or, for that matter to anyone facing the task of packing a good nutritious lunch — that won't get traded.

THE LUNCH BOX PROJECT

What are the best foods to put in a lunch box? The Quebec Food Guide recommends that at least one food from each of the following four Food Groups should be included:

Food Group	Main Nutrients
Breads and Cereals	B-vitamins, fibre
Meats and Alternates	protein, iron
Fruits and Vegetables	ascorbic acid, vitamin A, fibre
Milk and Milk products	calcium, riboflavin, vitamin D

A combination of lunch and snacks which is composed of foods selected from the four food groups should provide one third of the daily nutrient needs of children.

There is very little information available on the nutrient content of lunches carried by school children, and in particular those carried by children in extended kindergarten programs who may be carrying lunches and snacks for the first time. To increase our knowledge about the nutritional value of lunches and snacks, a survey was conducted in the spring of 1986 in four schools with extended kindergarten programs in the Montreal region. One hundred and forty-two students were included in the survey and observations were made on 354 lunch boxes. Did these lunches meet the recom-

mendations of the Quebec Food Guide? The Food Groups, and their frequency in all the lunch boxes are listed below:

Food Group	%	Typical Food	%
Breads & Cereals	97	bread, crackers	95
Meat & Alternates	95	eggs, cheese, nuts, meat, fish, poultry	61
Fruits & Vegetables	93	fruit	42
		fruit juices	78
		vegetables	57
			32
*Milk & Milk products	45	milk	29
		cheese	14
		yogurt	06

It was also found that 56 per cent of the lunch boxes contained sweetened items. These foods provide calories but have little nutritional value.

*A subsidized Milk Program, which operates in the schools from October to May, allows the children to have a 200 ml. carton of milk daily. When our survey was made, the Milk Program had concluded for the year in three of the schools and in those schools only 29 per cent of the lunches and snacks had a serving from the Milk and Milk Products group. In the school where the Milk Program was still operating, 91 per cent of the lunches and snacks had at least one serving from that group. Most of the children have milk as one of their snacks when it is provided by the Milk Program.

soft drinks, and fruit drinks are all high in sugar and should only be served occasionally.

GOOD SNACK IDEAS

Breads and Cereals

- whole wheat crackers
- whole wheat or bran muffins
- melba toast
- plain cookies: arrowroot, oatmeal or raisin

Meat and Alternates

- cheese cubes or wedges
- hard cooked egg
- peanuts or peanut butter

Fruits and Vegetables

- raw vegetables such as carrots, celery, turnip, cucumber, green pepper, cauliflower or broccoli
- raw seasonal fruit
- fruit canned in water or its own juice
- fruit juices (not fruit drinks)

Milk and Milk Products

- milk
- cottage cheese
- yogurt or yogurt drink

PLANNING AND SHOPPING IDEAS

- Plan lunch box menus before shopping.
- Plan to purchase foods that pack easily such as cheese, yogurt, nuts, whole wheat crackers, and fresh fruit and vegetables.
- Sandwiches and raw fruits and vegetables can be prepared the night before and refrigerated until morning.
- Sandwiches of meat, fish, poultry, and cheese freeze well, but not those containing eggs, mayonnaise, raw vegetables, or fruit jelly.
- Refrigerated or frozen sandwiches taken out in the morning will be at the proper temperature at lunch time.

SNACKS

Snacks are an important part of a child's daily food intake, and may be necessary for some children to meet their daily nutrient needs. The results of the Lunch Box Project showed that snacks provided a significant amount of the total nutrients in the lunch box. For example, snacks provided:

57% of the Vitamin A	45% of the Calcium
43% of the Riboflavin	33% of the Ascorbic acid
	30% of the Iron and calories

Snacks should be chosen from the four Food Groups, and should also be low in sugar. Candy bars, coated granola, granola bars, cakes, doughnuts,

EQUIPMENT

A strong metal or plastic lunch box, large enough to carry everything, is required.

Vacuum flasks, or Thermoses, allow a greater variety of foods to be packed. There are three types of flasks: a narrow mouth flask for hot or cold liquids such as soup or milk, a wide mouth flask for soups, stews, and casseroles, and a special cold food flask. These flasks keep food at the original temperature for four to six hours.

The lunch box and vacuum flask need special attention. In particular, the vacuum flask, including the spout, should be rinsed when it is brought home, washed thoroughly, and left uncovered overnight.

SAFETY HINTS

1. KEEP HOT FOODS HOT and COLD FOODS COLD

Using a vacuum flask or Thermos is the best way to maintain proper temperature. A Thermos can be preheated by pouring boiling water into it, or prechilled by placing Thermos and stopper into the refrigerator overnight, before filling with the beverage or food. The cold food flask has a gel lid that should be frozen overnight.

2. KEEP EVERYTHING CLEAN

Meal preparation should be done using clean hands, utensils and counter tops.

3. Fruits and vegetables should be thoroughly washed before packing.

4. Foods prepared the night before with salad dressing or mayonnaise which are refrigerated, will be safe to eat at lunch the next day.

5. Lunch boxes should not be placed in direct sun or on top of a radiator or heater at school.

ABOUT SANDWICHES

Since sandwiches are very popular, here are some helpful ideas:

- Frozen bread can be used. Fillings spread easily, and the sandwiches stay cooler longer.
- Unusual breads such as cheese, raisin, rye, pita, pumpernickel, or egg rolls such as kaiser, whole wheat, or bagels add variety.
- Unprocessed foods such as cheese, fish, meat, eggs and nuts are the most nutritious fillings. Processed foods like salami, mock chicken, and processed cheese are higher in fat and sodium and should be used less often.

FILLING IDEAS

Cheese: sliced or grated

Fish: tuna, salmon, or white fish

Meat: thinly sliced chicken, turkey, beef, pork, or ham

Eggs: chopped or sliced, can be mixed with one or more of the following:

salad dressing

chopped celery

chopped onion or green pepper

chopped pickle

cucumber

grated carrot

lettuce or tomato

alfalfa sprouts

chutney or relish

chili sauce or mustard

Peanut butter: plain or with the following:

chopped apple

sliced banana

raisins or dates

honey or jelly

chopped celery

grated orange rind

These sandwich alternatives can be kept in a wide mouth flask:

macaroni and cheese

beef stew

chili

thick soups

baked beans

spaghetti and sauce

leftover casseroles

These can be served cold or at room temperature:

cold chicken pieces

chick pea spread

salads with fish, eggs, or cheese

hard cooked eggs

pizza

LUNCH BOX MENUS

Each of the four food groups in Quebec's Food Guide are included in the following menus. The menus include foods for one lunch and two (*) snacks.

*apple chopped egg and green pepper sandwich fresh fruit milk *whole wheat crackers and cheese	*milk & oatmeal cookie chicken, lettuce, chili sauce on rye bread fresh fruit tomato juice *whole wheat muffin
*yogurt tuna and chopped apple on kaiser roll carrot sticks fruit juice *raisins and peanuts	*green pepper and cheese spaghetti and sauce fresh fruit milk *turnip and celery sticks
*celery and cream cheese peanut butter and honey on raisin bread whole wheat crackers milk *fresh fruit	*yogurt and raisin cookie cheese, tomato, lettuce on egg bread fresh fruit fruit juice *celery and peanut butter
*bran muffin and milk sliced beef, tomato, and mustard sandwich coleslaw fruit cocktail *carrot sticks	*hard cooked egg green salad with salmon slice of bread rice pudding milk *banana
*cottage cheese and fruit thick vegetable soup whole wheat bread fruit juice *arrowroots	*fresh fruit peanut butter and banana sandwich yogurt drink cucumber slices *oatmeal cookie

ACKNOWLEDGEMENTS

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PRODUCED BY McGill Dietetics Students: Catherine Atchison, Louise de Courval, Monique Pagé.

THE SHOW GOES ON Part I

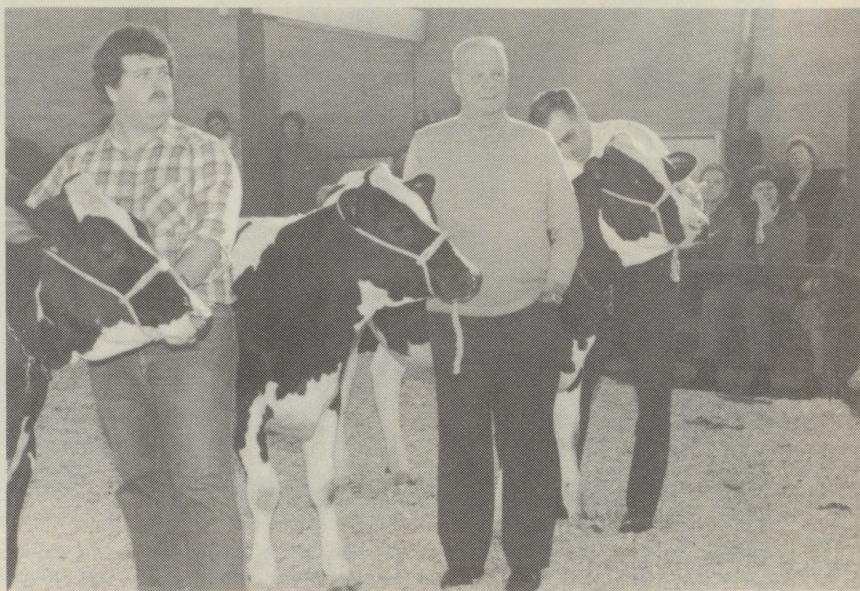
With the death of Jim Houston on August 1, 1986, (see *Inside Back Cover*), the Livestock Show lost one of its most ardent supporters. Thought it was written before his death, we suggest that this article be a tribute to him. It is also particularly appropriate in that the author Marg Zillig was the winner in 1984 of the Jim Houston Trophy which is presented to the individual who contributes the most to the Livestock Show.

by Margarete Zillig, BSc (Agr) '84

Among annual events held at Macdonald College, the Livestock Show ranks as one of the oldest. Since 1948 students have "crossed the tracks" to groom and train animals at the farm for a yearly show. Becoming acquainted with a cow, sheep, or pig from the college herd and teaching it, and oneself, the intricacies of showing etiquette has added spice to the routine diet of lectures and labs for many a student over the years.

My first winter at Mac, in 1983, was "spiced" with trying to learn how to control a pig with a cane! Thus my initial contact with the show was as a participant. In 1984, as a member of the organizing committee, I became aware that this event had been part of the Macdonald scene for a long time. I wondered how it had originated, how the early shows compared to those of today, and how it became a tradition. Hazel Clarke encouraged me to seek answers to these questions, suggesting that a review of the show's nearly 40 year history was due. I soon realized that a detailed account was beyond the scope of a Journal article. What follows is but an outline of an activity which has become part of the fabric of Macdonald College. The focus is on the Livestock Show with no attempt being made to describe the many facets of College Royal, once a large event of which the show was an integral part.

In trying to trace the development of the Livestock Show through the years, I initially consulted yearbooks. The quality of coverage varied considerably; some editions of *The Clan* contained fairly complete descriptions, others had only a few photographs, sometimes even without captions. To



A first for the 1985-86 Livestock Show was an Alumni Class. Jim Houston, centre, came second. Rod Duffy was the winner, with Andy Weldon placing third. Jim also presented prizes to various winners during the event.

gain a better perspective, I contacted some of the participants of past shows, interviewing them in person or by letter. Although many excused themselves for having only a dim memory of Livestock Shows, these people contributed a wealth of information. Their recollections were remarkable in their enthusiasm.

The Show's Development

Although livestock showing as an annual event began in 1948, it appears that students at the college learned to judge and exhibit farm animals soon after the founding of the institution. The late Professor J. F. Snell in his *History of Macdonald College* mentioned that "each year between the two great wars, the students of the college interested in live stock and organized as an Animal Husbandry Club held a mock sale or show of animals which attracted parents and other farm people." A "Little Live Stock Show" was mentioned as having been held on January 26, 1928.

In the fall of 1947 a group of students in the Animal Husbandry option, among them John Hamilton, Gordon Curtain, Val Swail, and Murray Templeton, hit upon the idea of putting together a College Royal for the following February. According to Val Swail, chairman of the first Royal organizing committee, some of his colleagues

were aware that the Ontario Agricultural College had begun such an event; the group at Mac was determined that their Royal should be better than O.A.C.'s! Although the Animal Husbandry students had been the instigators, the steering committee attracted representatives from each option on campus. The program for College Royal day, as described in a 1948 edition of the *Macdonald Journal*, included an official opening by the Canadian Minister of Agriculture, the Hon. J. G. Gardiner, displays by each department highlighting activities and current technology, a drama production — *The Green and Gold Revue* — and a "really good" livestock show.

John Hamilton and fourth year Animal Husbandry classmates organized that first show. The day-long affair was primarily a showmanship competition with Professor A. D. Runions from O.A.C. placing the participants according to their ability to exhibit an animal. Top showmen were F. M. Conolly of Montreal (Holstein), A. V. Wan Ping of British Guiana (swine), Robert (Bobby) Ness of Howick (Ayrshire) and D. A. Lockhart (sheep). Advancing to the championship class, each of the four lads was scored on how well he could show the other's animals. Robert Ness, a second year Diploma student, emerged as Grand Champion showman with D. A. Lockhart following in Reserve. Awards were



Flashback to 1948 and the first Livestock Show, while, below, last year's winners in the Ayrshire Final were Champion Scott Kirby, Dip II, and Reserve Champion Pauline St-Amant, Dip I, with François Beaudry, Dairy Judge from Granby.

presented in the evening at the Green and Gold. In the words of the champion, "The play was terrific and I received my trophy from the Canadian Minister of Agriculture. Needless to say, it was a big day in my life."

Although showmanship was the basis of the competition, animals were also placed according to conformation. Bringing in respected stockmen to judge the animals on their own merits served an educational purpose. As Robert Ness explained, it gave the students and other show spectators an opportunity to hear reasons why some animals had better type than others. Judges for this aspect of the 1948 show included J. L. McKellar of Vaudreuil for sheep and swine, W. A. Hodge for Holstein, and S. J. Chagnon for Ayrshire.

Although beef cattle were not recorded in accounts of the first show, Aberdeen Angus were being shown in the early 1950s. Also around this time, the Animal Husbandry Club Shield was mentioned. Students not only competed for honours individually, but points from their placing were accredited to their class. The shield was awarded to the class having earned the most points during the day. In 1951 the first year Diploma class achieved this honour. Further reference to this shield was not found; is it possible that there has been less class spirit in recent years; it seems this dimension of Livestock Show competition has been lost. Gordie Beaulieu,



herdsman at the college farm, mentioned this: "I am disappointed by the drop in the number of participants," he said. "The preparation is the same for 50 people as it is for 150. When there was a class shield to be won, every class would make sure that there was at least one showman in each division. That certainly seemed to raise participation. It's a great opportunity for students to get some hands-on experience, and since a number of our students have never worked with large animals, where else could they get this chance?"

Since 1958, the show has included a novice section. This was introduced to encourage participation by students with little or no experience in showing. Working with Holstein or Ayrshire calves, they competed amongst them-

selves for the Champion Novice Showman award.

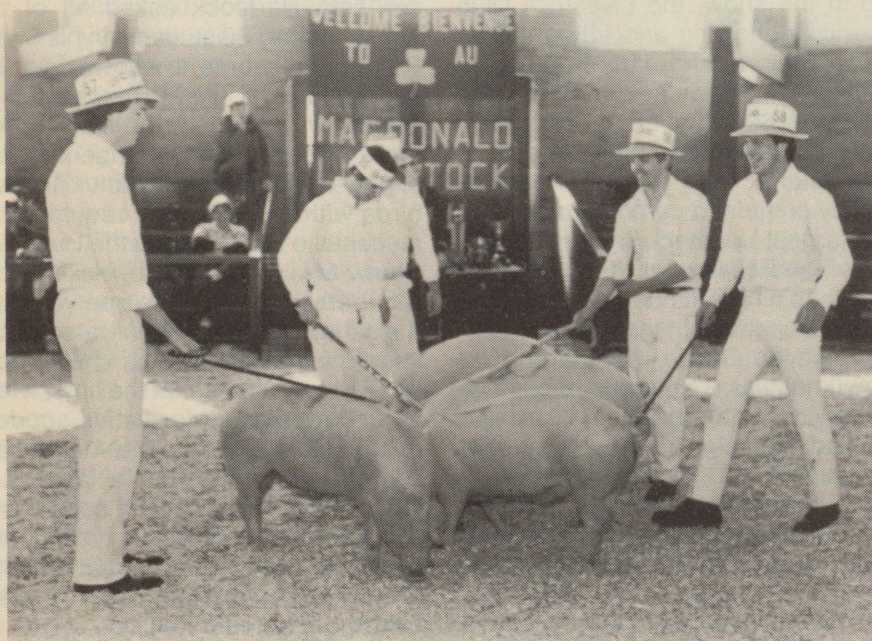
In the 1963 yearbook, Barbara Prescott was named as the "Grand Champion Lady Showman." It does not appear that women competed separately before or since then. In fact 10 years earlier Bernice Ness won the Grand Champion Showman trophy over Russ Dow.

Livestock shows have usually been held on one of the last Saturdays in February. Organization begins in earnest after the Christmas holidays with students usually having three to four weeks to prepare their animals. Occasionally these activities have been moved to the fall semester; shows held in October or November were noted in 1964, '73 and '75.

A substantial increase in the num-



Flashback to a solo performance in 1965 while, below, five showmen: Craig Findlay, Louise Sliger, Scott Kirby, David Bahler, and Duncan Fraser do a good job of controlling their animals in one of last year's swine classes.



ber of swine showmen in 1978 lengthened the show by half a day. Since then the 1½ day format has remained in place; showmanship classes start Friday afternoon and continue all day Saturday with the grand champion showman being decided late that afternoon. The popular wine and cheese reception at the Farm Centre following the final class on Saturday also became part of the program in 1978. Competitors, organizers, judges, and special guests enjoy this opportunity to "chat, chew, and sip!"

Traditionally animals from the college herds have been used for the show. These included market hogs, spring lambs, Angus heifers, and all ages of Holstein and Ayrshire cattle. With recent changes in the beef and sheep research programs, these animals were no longer available for show preparation. Since the late 1970s Dr. Louis Johnson of the Bois de la Roche Farm in Senneville has kindly loaned lambs and Angus young cattle to the students, permitting the sheep and beef classes to remain on the pro-

gram. With the arrival of a small number of Jerseys at the college, a showmanship class for this breed was introduced in 1980. A dairy final was then instituted to select a candidate from among the top two Holstein, Ayrshire, and Jersey showmen to advance to the Grand Champion Showman class. Previously both the Holstein and Ayrshire winners had entered this championship. Students have always been able to choose which type of livestock they wished to work with; however, in the interests of fairness, each participant is randomly matched with a particular animal.

The placing of animals according to conformation was dropped quite a number of years ago, probably in the mid 1960s. Without this aspect, the contingent of official judges has been reduced from half a dozen or so to two. Their task is to evaluate showmanship: how well the students have groomed and exhibited their animals.

Student judging competitions have often been held in connection with the Livestock Show. Yearbooks from 1948 to 1954 sometimes mentioned poultry and seeds judging. In the latter, students judged one class each of oats and timothy and then were asked to identify 20 specimens of seeds. The poultry competition consisted of three classes — judging live birds for egg producing ability and standard characteristics; rating the carcasses of dressed birds, and evaluating eggs for both exterior and interior quality. Students received extensive practice in judging and weight guessing of sheep, cattle, and pigs in their animal husbandry courses during the 40s and 50s which was perhaps the reason why a judging competition for these species was not a part of early College Royal programs.

Marinus Van de Sande, Royal president in 1964, wrote that a judging competition was on the program then. Held on the Saturday prior to the Livestock Show, each participant judged dairy, beef, sheep, and hogs. Bob Robson was the champion Livestock Judge that year.

Since 1979 the Livestock Club has organized an intercollegiate judging competition in conjunction with the annual show. Ann Louise Carson, Club president at the time, explained how it came that animal and crop judging were reintroduced; with Macdonald College celebrating its 75th anniversary.

sary "it was decided an extra special effort should be made — thus the idea of a judging competition." Diploma and Degree students representing agricultural colleges in Ontario, Quebec, the Maritimes, and New England compete for both team and individual honours. Members of the Quebec Young Farmers annual farm management tour also participate. The competition is in two parts: on Friday evening contestants judge dairy, beef, swine, sheep, hay, grain, and a mystery class while an hour on Saturday is divided between a sire selection exercise and an agricultural test. Placings and written reasons are required in all classes, with oral reasons being given only for the dairy class. The mystery class always raises eyebrows — in recent years contestants have been surprised by soil samples, African violets, and cucumbers!

People Make the Show

For its success, the Livestock Show depends on people — students, college staff, businesses and organizations, and the public. Students through the years have generally shown a keen interest in this event. As Russ Dow ('54) put it, for those in the Animal Husbandry option, showing "seemed the thing to do!" He remembered "a tremendous competitive spirit between diploma and degree students." Dick Huggard ('58) also recalled that virtually all Animal Science students took part either as showmen or organizers. Participation was not confined solely to students in the Animal Science program or to members of the Animal Science Club, noted Marinus Van de Sande ('64). He himself was in General Agriculture and he pointed out that Sandy Cameron, in Agricultural Engineering, was the show superintendent in 1964.

Although the Livestock Show has provided experienced showmen with a splendid chance to test their expertise, efforts have been made to involve students who had not previously learned animal grooming or training from a 4-H or Young Farmer's program. Back in 1958 Dick Huggard and Ray Smith prepared guidelines for fitting and showing all types of livestock and they lined up experienced showmen to help "greenhorns" prepare for show day. This gave the many girls taking teacher

or Home Economics training a chance to participate. As Jim Houston, a Dip grad and retired Farm Manager, recalled: "a lot of these girls were from the city, and they had no idea what a farm looked like. It was a great thing for the youngsters at that time to find out what rural life was all about." Marlene (Robinson) MacMillan also stated that during her time at Mac in the mid 60s there were "a lot of student teachers who were anxious to try their hand at showing but who had no knowledge or experience of the subject." The Animal Science Club conducted showmanship training sessions.

The Faculty of Education moved to McGill's downtown campus in 1970 and over the years the proportion of students at Mac from non farm backgrounds has increased steadily. In fact, today the majority of young people in Agriculture and Dietetics and Human Nutrition are from urban homes. To encourage their participation in the show, the Livestock Club organizes showing and fitting clinics during January and early February.

Livestock Shows held from the late 40s to mid 60s were characterized by strong student involvement. Yearbook descriptions from that period frequently contained comments such as "the largest Livestock Show in the history of the Royal..." or "the Livestock Show had a record number of classes and participants." In the words of Marinus Van de Sande, "the arena (at showtime) was a continuous beehive of activity." Marlene MacMillan also recalled "a high level of student enthusiasm and participation." She added "it seemed that NSAC students were the ones who were the most active in initiating and leading the College Royal at Mac and were the keenest competitors!" Coming from a native of Harvey Station, New Brunswick, such "Swampie" bias is quite understandable!

In the late 1960s and early 1970s interest among students in the Livestock Show appears to have waned somewhat. Yearbooks lacked information and I did not find a participant from that era to interview. However, from '73, Allen Shaw remembered that students from the then consolidating John Abbott CEGEP took part in the Show. One such CEGEP student in 1975 was Joanne (Enright) van der Linden. She wrote

"There were a lot of farm kids at JAC, and we all participated in the Livestock Show." In fact, the Grand Champion Showman in 1975 was Pamela Ness, a JAC science student and daughter of 1948 Grand Champion Bobby Ness! Joanne completed her B.Sc. (Agr.) at Macdonald in 1980; as a five year veteran of the Show she was a storehouse of information!

From discussions with people who were students during the early years of the show, I learned that although participation may not have been mandatory, the Animal Husbandry professors of the time expected their students to take part and most students, caught up by the fabled Mac spirit, eagerly signed up to show an animal or help with running the event. In 1977 as an assignment in their dairy course, second year Diploma students were asked to show a Holstein or Ayrshire. Since then, the requirement to show an animal has remained in effect for the Dips in first year. In 1978 Professor Tom Hartsock asked all of the approximately 80 students in his Swine Production course to show a pig. He explained why: "I was anxious to see the Show expanded and also to give more of our non farm students more experience at the farm, so I killed two birds with one stone by requiring my students to show a pig in the Livestock Show. My intent was to make this a requirement for just the one year and hope that the interest generated would keep the number of pigs shown up." Jim Feeny, a student at the time, wrote a humorous and informative account of the 1978 Show in the *Macdonald Journal* (June 1978). "Initial doubts (about showing a pig) were suppressed by a sense of challenge." Having "the benefit of a university education," the students thought they had an edge over the reputedly intelligent pig! Furthermore they "had a manpower advantage" because Professor Hartsock decided that with not enough pigs for every student to have his own, each pig would be shown by two students.

According to Jim Feeny, 135 students prepared animals for the 1978 show. That may have been an all time high. It was the only actual figure for show participants I found. Currently the number of showmen ranges from 80 to 100.

(Part II, Staff Support,
next issue)

DIPLOMA

C DIP 66 REUNION by Hazel M. Clarke

When Norm Campbell, Dip '66 and Manager of the Dairy Herd Analysis Service (DHAS) here at Macdonald read in the last issue of the Journal that the Macdonald Branch of the McGill Graduates' Society was looking for "lost Dips" — actually their names and addresses for the records — he felt that if the camaraderie found in his own class is an example, then there would be no problem with other classes.

"There were 20 of us in our Dip 66 class; two have passed away since then: Gary Hill in a farm accident and Stuart McDonald from illness about five years ago. That leaves 18, and I have valid addresses for

17 of them. The last letter I sent to Claude Langlois was returned unknown, but I'm sure he's around Quebec somewhere and we could get in touch with him."

Those 17 addresses were used last spring by Jo-Anne (Merrill) Duckworth when she and her husband Jack, Dip '68, very graciously made their beautiful home just outside Barrie, Ontario, available to the class for a July barbecue-picnic-type reunion.

"Nine members of the class plus husbands, wives, or friends made it to the reunion," Norm said, pointing out that as four of the class were too far away to come for such a short time and one, Goldwyn George had to cancel out at the last minute because of family problems he felt that was a good turnout. "We took along our own steaks and refreshments and used Jack and Jo-Anne's home to have a good visit."

Norm Campbell said that they got caught up on all that had happened since their last reunion. "We have had a 10-year reunion, a 15-year reunion, and this was our 20-year reunion. We talked about the possibility of a 25th reunion and hope to organize it a little earlier so that we might get the folks from further afield to attend."

Of the nine who were at the 20th



Together again! Left to right: Kris Johnston, Donna Prescott, Betty Campbell, Norm Campbell, Mac Macdonald, Steve Coote, Jo-Anne Duckworth, Jim Johnston, Sid Prescott, Audrey Coote, Elizabeth, Ed Elliot, Roger D'Aoust, and Sue Childs.

reunion last July, most are in agriculture or related fields, but a few have branched out into other occupations. "Sue Childs is in DHAS, Ed Elliott works at a paper mill at Portage du Four, near Shawville, and has a cow-calf operation, Roger D'Aoust has a large hog operation in Ormstown, Sid Prescott has a dairy farm down at Bulwar where Jo-Anne came from, and Steve Coote has a dairy farm just outside of Kemptville, Jimmy Johnston from Orillia sells industrial equipment for John Deere, Mac Macdonald, who grew up in Baie d'Urfé, now works for the Ontario Housing Corporation. He assists municipalities in such things as setting up non profit corporations to build senior citizen housing, and," Norm continued with enthusiasm, "though I think Mac would consider himself an amateur at the grape growing and wine making business, he brought a case of some of his endeavours to the reunion. It was all consumed and, in as much as a bunch of Dips can appreciate the finer points of wine, we all thought it was pretty good!"

To bring you up-to-date on the Class of '66's hosts, Norm said, "Jack Duckworth is production manager at a cheese plant in Cookstown. Jo-Anne worked for DHAS for a couple of years after graduating, then she and Jack were married and they moved to Hartland, New Brunswick, with Humpty Dumpty potato chips. Now in Barrie, they have two teenage girls. Jo-Anne has done some beautiful water colours over the past few years and I have a couple at home that she did years ago that I am very proud of."

Of those who were unable to get to the reunion, Norm told us that: "Goldwyn George is in sales for an industrial cleaning outfit. Peter Skaaning works with the AI unit in Millar. B.C., Richard Schulz has his own livestock brokerage company in Edmonton (Diploma Corner, Macdonald Journal, May, 1984), Michel Toupin is in St. John's, Quebec, and I believe he is teaching English in a French-language CEGEP. Earl Bottril has a cow-calf operation in Quyon, and Frank Liebrecht is sheep farming in Sutton."

"One of our classmates," Norm

continued, "Camilo Ucros, came to our class from Colombia and went back to the family enterprise. He is managing their beef enterprise which I believe is very large and comprises several thousands acres. Roger D'Aoust has been down to visit him a couple of times and he was telling us at the reunion that the farm is located very close to where they had the volcano that buried the town in Colombia.

"Doug Carr! Like the Bell add says, 'we're not sure' just what he is doing now." He was in England working in a fish wholesaling business last time I heard of him about five years ago."

Norm said that the Class of '66 don't keep in touch with a newsletter. "I think we are probably one of the few Dip classes that even really bothered with a permanent executive since we graduated. Jo-Anne is our secretary. We don't write to each other except for special occasions. Certainly at the death of Gary Hill we organized a Gary Hill Memorial Fund with funds invested for Gary's children when they come of school age. And then, we communicated with the class at the time of Stuart McDonald's death when a memorial foundation was set up and a fair number of the class responded to that.

"I am delighted that they are recruiting Dips into the alumni," Norm said. "I suppose I am as guilty as anyone in really not giving more support, because back in the early 70s I did serve a term as president of the grad society. I feel there have not been very many of the dip students who have participated in the alumni executive or come to the general reunion and this is unfortunate.

"If there is a positive effort right now to get more dips involved, I think this is all to the good. But," Norm pointed out, "it could be a fairly large task to carry out because most dip classes may not have the kind of records our class kept. I can't conceive of a dip that didn't consider himself as much a part of Clan Macdonald as any other student, be they undergrads or postgrads, but they haven't all maintained the same contact with the college that some of the degree classes have. I know quite a number of dips who would make a very positive contribution to the grad society should they be persuaded to become involved in grad society affairs."

WOODSMEN COMPETITION

The Macdonald College 27th Annual Intercollegiate Woodsmen Competition will take place on Saturday, January 24, 1987, beginning at 8 a.m. until approximately 5 p.m., on the field by the Centennial Centre. Continuing with tradition, an awards ceremony and beer bash starting at 8 p.m. will conclude the day's events.

A special welcome to all alumni. Come join the fun!

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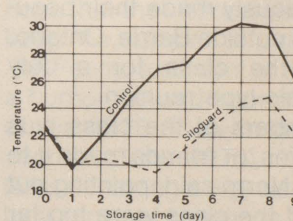
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Agricultural Structures in the Future

by Professor Suzelle Barrington
Department of Agricultural
Engineering

The first half of the 1980s has been filled with financial stress for general agricultural producers as most produce prices dropped slightly while production costs kept increasing. In many instances, net assets decreased in favour of liabilities. And there are no better signs in sight, at least not until government spending is curtailed and the national debt is decreased.

Faced with some tough financial times ahead, most industries will be looking for new means and technologies to cut down their production costs. The solution will not be in increased production since consumption has not been rising. The solution will be to cut capital investments and equipment as well as energy costs while still maintaining the same production. Labour requirements will probably be kept as most industries are affected by public opinion. Thus industries will be producing the same quality and quantity of products but at lower costs.

Agriculture will have to follow this industrial trend if it wants to stay in the race. Pressure will also come from government agencies as they will not be able to afford the generous grant programs offered since the early 1970s. Agricultural producers may be relieved to learn that agrologists and animal scientists have already been working on the problem. For instance, dairy specialists can, as of 1985, boost the milk production of a cow by as much as 40 per cent through the use of hormones. Plant breeders are able to stem the growth of cereal straw in order to increase ear weight without lodging. All this research is aimed at increasing production while maintaining the same amount of livestock or land area, thus maintaining the general expenditure for better production.

Agricultural engineers will also be involved in this new technological trend. Although their efforts to reduce energy consumption will be sustained, new areas will have to be researched.

For instance, agricultural engineers will have to develop low-cost buildings while still maintaining livestock com-

fort or produce quality. Earth covered structures offer perhaps a solution. (After earthen manure reservoirs, why not investigate earth building!) Already, several American universities, through their civil engineering departments, have built such structures. In general earth covered shelters have proven themselves superior in energy performance. In winter they offer excellent insulation against cold weather. In summer they provide a cooling effect against hot temperatures. For all seasons, they show very little outside air infiltration and would, therefore, be appropriate for control atmosphere fruit and vegetable storages. These earth shelters have offered very low maintenance costs as they are almost 100 per cent covered by soil. In most instances, the soil used to cover these dwellings is landscaped into a very attractive decor. Furthermore, these shelters have offered excellent protection against severe weather conditions throughout the United States. These earth dwellings only lack one thing to become a success: their construction costs are high. Because conventional materials have been used to build them, and the soil covering the structure increases the load on the roof and walls, these earth shelters have required a high initial investment. From 1980 to 1983 the University of Texas was successful in developing a dome roof which would be able to carry the weight of a 1.0 metre (three feet) soil depth on to walls some 15 m (50 feet) apart. In the years to come, new wall construction concepts will be investigated and, who knows? Your cattle may be housed in earth structures by the year 2000.

Sensitive to Stresses

In a second instance, the animals' environment will become very important as these high producing livestock will be very sensitive to all stresses. Agricultural engineers will have to modernize the ventilation systems in use at present. In the past 10 years civil engineers have identified efficiency problems with ventilation systems. Loss of efficiency was occurring through the short circuiting of fresh air from the inlets directly to the outlets

without refreshing the building. In early 1980 the University of Guelph attempted to measure some of the effects for farm buildings. Their attempt was unsuccessful as the model used failed to represent the actual situation. Nevertheless, we can guess that most gravity inlet systems perform poorly, especially during the winter. This not only implies poor ventilation, but energy as well as heating losses.

Agricultural engineers will also have to examine "social stresses" among livestock at high densities. Social stresses or "crowding" have been known to decrease poultry, hog, and beef growth rate, while increasing their feed consumption. For instance, hogs have demonstrated a 0.5 kg feed per kg weight gain increase when kept in groups of above 20. Some research with beef cattle would seem to suggest a maximum group size of 50. Other authors have indicated that food availability and the synchronizing of livestock activities are two important factors affecting group sizes and crowding. This area is lacking in research but has an important influence on the performance of livestock.

Fruits and vegetables will require better environmental control to achieve ever longer storage periods and provide high quality produce from one crop to the next. Control atmosphere rooms will definitely be extended to more produce. Agricultural engineers are already investigating storage possibilities by modifying the atmospheric composition used at present for control atmosphere rooms.

Agricultural structures in the years to come will become highly controlled buildings without necessarily becoming over-mechanized. The agricultural producer will be looking for low capital investment, efficient environmental control, and moderate but un strenuous labour requirements. Future livestock buildings will be oriented towards greater animal comfort and preference. Fruit and vegetable storages will represent rooms of highly controlled atmosphere. If in 1986 agricultural producers can laugh at the fact that their livestock is better fed than they are, then in 1995 they will also consider their livestock better housed!

VIGNETTES ON A 75TH

Compiled by Hazel M. Clarke

It's been a fantastic year for the Quebec Women's Institutes — banquets and speeches, picnics and entertainment, media coverage and tributes, ceremonial plantings and special mementoes. QWI members from the Gaspé to the Gatineaus have been celebrating the fact that 75 years ago on January 27, 1911, several women spearheaded by Mrs. George Beach gathered in Best's Hall in Dunham, Quebec, and, with the guidance of Mrs. Jean Muldrew from Macdonald College, the first Women's Institute in Quebec was organized.

In six weeks' time a second branch was formed in Howick and over the next few years the Institute spread to all corners of the province. Through two world wars, a depression, a declining farming population and urban encroachment with all its so-called amenities, the WI has survived. Granted, it has seen old branches fold faster than new ones spring up and, with more women joining the work force and more competition from other organizations, overall membership has steadily declined, and an ever-increasing sprinkling of white hair is replacing the colours of youth. Needs have changed, accomplishments differ, but the goals remain the same: to improve standards in the home, to strengthen the family, and to lend a helping hand where needed in the community, the country, the world. There are still women to educate. Members of the QWI belong to an organization, the Associated Country Women of the World (ACWW), that includes some 43,000 women in Canada and some nine million in over 60 countries of the world. Many of the women in those countries are back where our rural women were when the first Women's Institute was started in Stoney Creek, Ontario.

The Beginning

A child died; an organization was born. Eighteen-month old John Harold died from drinking impure milk. His mother, Adelaide Hoodless, did not consider it an accident; she blamed her lack of knowledge and vowed that

she would do all she could to help educate other women. This earnest desire led to the founding of the Women's Institutes in Stoney Creek on February 19, 1897. Mrs. Hoodless also approached Sir William Macdonald, telling him of the need for more and better scientific education for women and, as a result, a gift of \$200,000 was given for the Macdonald Institute at the Ontario Agricultural College in Guelph. In a biography on Adelaide Hoodless, it is noted that Sir William remembered Mrs. Hoodless's dream when planning Macdonald College.

There has been one constant since the time when Mrs. Muldrew made the trip to Dunham in 1911: there has been a good, warm relationship between the members of the QWI and Macdonald College. Over the past few months I have seen excellent recognition of the part that the WI has played in the development of the Quebec rural community, and the Journal would be remiss, indeed, if it did not add its voice to those saying "Happy Anniversary." It has been my good fortune to talk with many WI members on a variety of topics, not least of which is there still a need for WI? I think that from the following touches of history and glimpses of the present, the answer for the future is a resounding "Yes! There is still a need."

Congratulations

"For three quarters of a century your members have been working for the betterment of the many facets of rural life in communities across Quebec. Whether it be in the field of education, culture, home economics, health, citizenship — or my favourite, agriculture — the Quebec Women's Institutes have established a strong tradition of not only being there, but of being involved. I would like to congratulate each member in the 83 QWI branches across the province for this involvement. I assure you that the new Minister of Agriculture appreciates your contribution to Quebec agriculture and to the rural way of life."

Michel Pagé, Quebec Minister of Agriculture, from speech given at 75th Anniversary banquet at Macdonald College.

New Members

"We got 98 new members this year; let's try to double the number next year. We belong to one of the greatest organizations in the world and, where possible, we get an opportunity to travel. When I was attending an ACWW conference overseas, I remember one man asking another: 'What does ACWW stand for?' Without hesitation the other replied, 'A country woman wandering.'"

Ethel McGibbon

QWI Past President, Argenteuil Co.

A Voice for Change

We have never been a pressure group. For years the QWI worked with resolutions for pasteurized milk; it finally happened. We just kept at it until someone listened. We should now tackle the current issues such as pornography and acid rain in a similar fashion."

Doris Cascadden, Past Provincial Treasurer

An Education

"When she was provincial president Edith Westover got me interested in travelling to the ACWW conferences. I've been to Australia and New Zealand, and my husband and I went to Germany and to Vancouver. They used to call the WI the country woman's university; it still is. Our workshops at convention are excellent. We teach each other; we learn from each other, from our speakers and our programs. As we are still learning, there is still a need."

Ola Carr, Sutton WI, Brome Co.

Charity

We have an active group of about 25 members. We raised about \$2,000 on the afghans we made and, among other causes, we support a foster child in a foreign country."

Daisy Henderson, Black Cape WI, Bonaventure Co.



The official opening ceremony on June 1, 1985, of the Memphremagog Library was attended by members of the Austin WI, the QWI Executive, and, l to r, Kathleen Milne, President of the Board of Directors, Agnes Fisher, founding member of the library and WI member, Mme Gabrielle Bertrand, MP for Brome-Missisquoi and, back row, Father Laurent Lareau of St. Patrick's Church, the Rev. Ross of St. Luke's Anglican Church, and Keith Kerr, Acting Mayor of Magog.

A Library for the Community

"Sponsored by the Austin Women's Institute, the Memphremagog Library began in a very small way with a few shelves of books in the Princess Elizabeth High School in the summer of 1964. For 10 years it was operated entirely by volunteers. Interest in it grew steadily and rapidly. In 1971 the library was constituted a corporation by letters patent. Until a year ago, it was situated in very small and inadequate quarters. In the summer of 1984, however, a grant of \$450,000 was received from the Federal Department of Employment and Immigration which made it possible for a beautiful new, bright, functional, spacious building to be erected and fully equipped.

"The Library was opened to the public on April 25, 1985, and the official opening ceremony and reception took place on June 1, 1985. When we moved to the new building there were 848 members. On April 30, 1986, we were able to boast of 1,634 members.

"The library is funded partly by the City of Magog, partly by the Ministère d'Affaires Culturelles du Québec, by membership fees, fines, and donations. The Austin WI has never failed to assist financially each year.

"Citizens of Magog and the surrounding area will ever be indebted to the members of Austin Women's Insti-

tute for having initiated the project and for having supported it financially and promoted its interests for so many years."

H. Kathleen Milne, President of the Board of Directors, Memphremagog Library Inc.

The Mac Connection

Katherine Fisher, then head of the School of Household Science, helped organize branches in Pontiac County with Miss Sophie Armstrong, who became the first Provincial President.
QWI History

Fun and Friendship

"Above all the WI has meant friendship. I remember going to one member's house quite a few years back and she desperately needed to have a bedroom wallpapered. So half of us conducted a meeting downstairs and the rest went up and measured, cut, and pasted. When we needed a vote, one of us would go to the bottom of the stairs and call up. There would be a discussion upstairs and the answer would be called down to us."

Ina Kilgour, QWI Past President, Pontiac County

Helping in the Community

"The Lennoxville and Ascot Historical Society are trying to raise money to buy a large property which would make an excellent cultural centre, and our branch decided to put on a lunch. Two of us had saved the turkey carcasses from a United Church supper and we made turkey soup — I had three large kettles of stock on my wood stove which finally made two kettles of soup. Meat from the bones went into sandwich fillings. Another member made pea soup and even borrowed another ham bone from a neighbour. She, too, saved the meat for sandwich fillings. As we had also saved rolls from the church supper, we called it a 'hard times luncheon!' We also served egg sandwiches and three or four kinds of pie. Lunch was served in the Catholic Church hall and, as we didn't know the kitchen, one of the members worked with us. Working together drew us together and many of their members came to the lunch. I spent 1-1/2 hours washing dishes and I had an easy job! We served 169 people from 11 until 1:30 and cleared just under \$600."

Gwen Parker, QWI Past President Sherbrooke Co.

The Mac Connection

In 1913 Frederica Campbell was hired by Macdonald College to act as a superintendent of the Women's Institutes. She was the first of a long list of demonstrators and technicians who travelled from branch to branch instructing the women in everything from home preserving to hat making. Along with two other awards given annually to Mac students, the QWI present the Frederica Campbell MacFarlane Scholarship to a student in the School of Dietetics and Human Nutrition.

In 1939 the decision was made by McGill to stop paying the salaries of the demonstrators. This responsibility was taken on by the Quebec Department of Agriculture, who were already paying for the printing of WI handbooks. This involvement by the government was instigated by Dean Harrison in 1914 and some government assistance continues to this day. The college continues to provide office space for the provincial secretary.

Persistence

"If we worked as hard against pollution as we did about pasteurizing milk, we would do very well. So many things that we started have been taken over by the government, but you have to keep poking the government and we women can still do that."

Hanna Smith, Upper Lachute East End WI, Argenteuil Co.

Meetings were important

"The women got to meetings no matter what, and Mrs. Embury tells of one incident: 'I belonged to the Institute in the horse and buggy days and I will tell you how important meetings were to us. We had planned to go to our meeting that was seven or eight miles away. I was in the habit of driving a pair of horses and a two-seated sleigh to enable me to carry five or six members besides myself. It snowed and the wind blew all the night before and by morning the roads were almost impassable. However, we had made our plans and nothing could discourage us. We started and were going along nicely when all of a sudden the horses plunged into a huge drift, the sleigh tipped over and the women, food, and all went out. But we were always prepared for such occasions. I looked after the horses and got them loose from the sleigh and the other women handled the shovels and got the sleigh out of the drift. We hitched on and away we went, a little late for our meeting, but in time to make plans for the next one.'"

From a paper by Norma Holmes, former secretary of QWI and member of Stanstead North WI, Stanstead Co.

Teaching the Young

"A group of 106 nursery school children visited the orchard and spent a busy day picking apples. They also had a chance to ride horseback — a first for most of them. Back at school, they made apple sauce cake, and other recipes using apples, including apple juice."

Pearl Rowell, Abbotsford WI, Rouville Co.



Three of the Sherbrooke County WI members who gathered to assemble ribbons in WI colours for the 75th anniversary convention.

Fellowship

"The late Eldora Turner from our county suggested that for our 75th we assemble blue and gold ribbons to place our WI pins on at convention, and we were asked to do them. We had a get together in Isabel Butler's home. I had asked a member from each branch to come, and it was a real team effort. We set up an assembly line and had it all finished in a couple of hours. These ribbons were certainly appreciated by the members at convention, and we enjoyed a delicious luncheon."

Marion Annesley, Ascot WI, Sherbrooke Co.

Saving Our Heritage

"I have a picture of myself sitting on my mother's knee at a Wyman WI meeting, and I must have been about three. The QWI and I are the same age; when I was 70 I compiled and printed a songbook for the WI; this year I chose to give prizes for three handicraft competitions: knitting for first time entrants, a maple leaf quilt block, and a sampler. I have a sampler made by my great grandmother — we must save the art of our heritage."

Hilda Graham, Wyman WI, Gatineau Co.,

Changing for the Times

"We have to change with the times and we are changing, but the WI will continue to place emphasis on educating women and strengthening the family. We are also looking at some of the tough issues of today: battered women, drug use among children and teenagers, pollution and the environment, and the effects of freer trade on the agricultural economy."

"I hope that we are doing the things that will fulfil the needs of rural young women."

**Lucy French, QWI President
Baldwin-Cartier Co.**

Senior Citizens

"I wanted to be an Institute member from the time I first got married. Our biggest project is working with our senior citizens, and we especially try to reach those living alone. We also support our local 4-H club and other organizations. We are all hard working farm folk. We get involved. We know what a good day's work is and we enjoy the fellowship. The hard work doesn't seem too bad when you have fellowship to go along with it."

Joan Griffith, Upper Lachute East End, Argenteuil Co.

The Mac Connection

School fairs were started in the early years by Institute members. In 1914 they were held in Mississquoi County, and in 1916-20, settings of eggs and 25 lots of seeds and potatoes were sent from Macdonald College to this county. By 1926 there were 20 branches assisting in the work of distributing seeds, eggs for hatching, and contributing prizes for school fair work. Richmond County promoted strawberry growing, one district having 15 plots, most of which were started from stock sent from Macdonald College. (Many changes have occurred but several counties still promote the School Fairs. Seeds are given out, gardens judged, and produce brought in for competition. Crafts such as posters, artwork, printing, writing, cooking, and cake decorating have been added to the program).

Convention at Macdonald

When Dean Harrison suggested in 1914 that representatives from the eight branches travel to Mac to work on a constitution, a tradition of coming to Macdonald for an annual convention was established and it has continued uninterrupted..

50 Years a Member

"Having been left a widow in 1934, I moved to Rawdon and joined the WI in 1936. The Institute has been a very large part of my life for these last 50 years. When war broke out we were one of the first branches to apply to have a branch of the Red Cross in the area. We ran a free dental clinic for the school for a number of years. We would pay for one visit a year to the dentist and he did a school visit free of charge."

Beth Hubbard, Rawdon WI and now West Island WI, Baldwin Cartier

The Mac Connection

"To celebrate the 75th anniversary, 20 Adelaide Hoodless roses — one for each WI county — were planted outside Laird Hall. Dr. Roger Buckland, Dean of the Faculty of Agriculture, and Lucy French, QWI President, turned the sod for the benefit of photographers."

Darleen Sabetta, QWI Publicity

A Better Community

"It was said that any community having a Women's Institute was a better community. It was true. They looked around and wherever they saw anything that needed doing, they did it, even to getting street lights and sidewalks. They helped build community halls. They worked for consolidated schools, they worked for health units, but before they got these, they had doctors visit the schools to examine the children. At Way's Mills Dr. Brown found that six needed tonsils and adenoids removed and two had extra teeth. We had a big house with lots of beds, so Dr. Brown and Dr. Stockwell from Stanstead and a nurse came. They would take one child in, give him a whiff of ether, remove whatever needed removing, and carry the patient up to a bed. There was a whole row of tonsils and adenoids on the window sill. You could smell the ether for days afterwards."

From a paper by Norma Holmes

Part of the Community

For the past 25 years the Stanstead County Tea Room has been providing a welcome opportunity to rest one's feet, chat with friends, and satisfy the appetite at the Ayer's Cliff Fair. Helen Johnston has been chairperson of the tea room since 1963, and she has the task of asking each of the five branches for food and workers and for arranging the number of hours each will be required. Last year Rheta Taylor became her assistant, and both husbands help their wives when needed. Teabread and cookies along with tea or coffee sold for 25 cents when the tea room first opened. Doughnuts have been added to the menu and the price has risen to \$1. Sounds like it is still good value for the money.

A Leading Force

"Encourage others to become members so that the Women's Institutes will continue to be a leading force on the Quebec rural scene in the years to come."

Edna L. Smith, Past President, QWI. Sherbrooke Co.

Husbands Support Appreciated

"We have to have our husbands' support. There are times when they have to get their own meals and may come home to an empty house for three or four days while we are attending meetings. They often take members to meetings, and if we are having card parties or other functions to raise money, they are right there helping to set up tables and carry boxes. Many of our social functions are geared to husbands and families, and most husbands enjoy participating."

Marion Annesley, Ascot WI, Sherbrooke Co.

And, finally, two comments, one from a young mother and member; the other from a staff writer of the Township Sun:

"I believe strongly in the aims of the Women's Institute, their values should be the guideline in anyone's life, and I would be extremely proud of my daughter if she chose to follow those values through her life."

From a paper by Darleen Sabetta, Franklin Centre WI, Chateauguay-Huntingdon Co.

"The need for the Women's Institute continues to grow, but if the needs of women and the challenges of the next quarter century are to be met, anglophone women must step forward and support a group which met their needs for 75 years."

from "The Quebec Women's Institute: 75 Years of Service" Townships Sun

I wish I'd said that! There have been thousands of women, many branches, many counties: each has had a story that could be told. At present there are just over 1,500 women in 83 branches in 20 counties — their stories and accomplishments will continue as long as there is an uneducated woman, a lonely senior citizen, an agricultural fair, a child in need, a ploughing match to cater for, a community hall to paint, a sister member in Africa in need of clean water, a friend to be made, a neighbour to help, a cup of tea to be drunk when the task is done. Happy Anniversary. May your numbers grow and your years increase.

REUNION '86

MACDONALD LOOKS BACK AND FORWARD

The Macdonald Stewart Building was bustling with activity early on Saturday morning, September 27, as graduates from many parts of Canada and the United States converged to take part in Macdonald's Reunion '86 program.

A busy start to the day was a sign of things to come. Attracted by a wide range of activities and the fine sunny weather, by midday more than 200 graduates had passed through the registration area, enjoyed juice, coffee, and doughnuts served by students belonging to ACHES (Association of Canadian Home Economics Students), and taken part in at least one of the morning's scheduled programs.

The Macdonald spirit was evident in the large number of staff and students on hand — manning exhibitions, participating in seminars, staffing the "open house" visits to selected areas of the college or simply chatting informally with graduates.

For the early birds, Elwood Quinn and Christine Rafuse gave guided tours of the greenhouses, described some of the many teaching and research projects underway and, according to Jean McHarg, Reunion '86 Chairman, passed on many useful tips.

"Open house" visits to the Lyman Entomological Museum and the Library, arranged courtesy of Curator Dr. Michael Sanborne and Janet Finlayson, were scheduled throughout the day.

Under the direction of Linda Currie, staff from the School of Dietetics and Human Nutrition manned an active display, where graduates were invited to take part in a nutrition and fitness check-up. The measurement of body fat and a computer analysis of daily food intake were soon topics of conversation!

No one had anticipated "standing room only" for two topical and thought-provoking seminars on "The Pesticide Controversy" and "Feeding a Hungry World" given by no less than nine Mac-



Dietetics student Luce Bernard puts data into the computer for Mary C. Freeman BCs (HEC) '41.



Graduates enjoyed a tour of the greenhouses with guide Christine Rafuse.

donald staff, all experts in their field. Arguments were presented by panelists of opposing viewpoints and staff with first-hand experience shared their expertise on the problems in the Third World.

After the luncheon, Farm Director Rudi Dallenbach gave tours of the new Animal Teaching and Research Com-

plex. Although only the first of three phases of building had been completed, a full-scale model showing the final layout was also on display.

Whether graduates chose to stroll around the campus on foot or see it from one of the scheduled van tours, everyone agreed that it had never looked better.



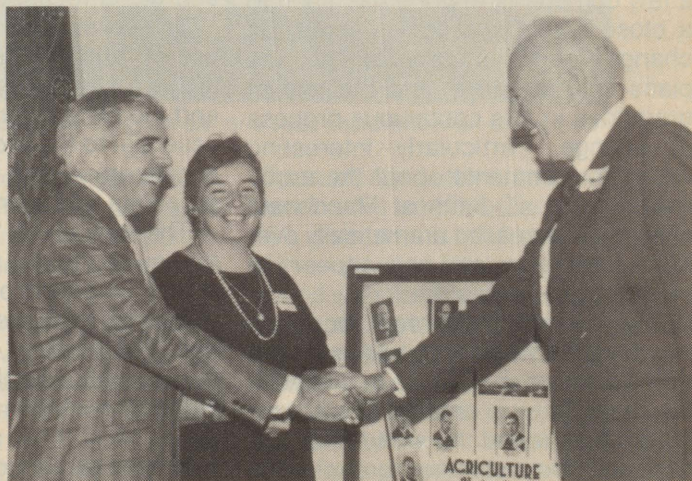
Members of the Class of '36 in attendance at Reunion were: Thomas G. Cahusac, Elizabeth (Campbell) Cawdron, Jeannine Champoux, Peggy (Glen) DuPorte, Professor Robert Hilton, Eileen E. Rodger, Nancy Skinner, and Mildred (Mahood) Thomson.



Enjoying the Dean's Reception and the chance to chat with the Drs Rowles were Mr. and Mrs. Hollis, Mr. and Mrs. Jefferson, and Mr. and Mrs. Chilakos.



Joan Crossen, BSc (HEC) '56, with Dr. Roger Buckland and J. William (Bill) Ritchie, BSc (Agr) '51.



Branch President Grant Ross and Reunion Chairman Jean McHarg greet Thomas G. Cahusac, Class of '36.

A LIVELY AND ENJOYABLE LUNCHEON

The Reunion '86 luncheon brought together graduates spanning a period of about 50 years. Grant Ross '56, now past president of the Macdonald Branch of the Graduates' Society, acted as Chairman and began with a very warm welcome from the Reunion Committee.

Approximately 200 graduates, spouses, and staff sat at the old tables of Stewart Hall for an enjoyable lunch of gazpacho soup, quiche, and salad. Reunion '86 chairman, Jean McHarg, said grace and Roger Buckland followed shortly after with toasts to the Classes of '36 and '61. The irrepressible Bill Ritchie, Class of '51, responded on behalf of the returning graduates with a toast to Macdonald College. In typical Ritchie fashion, he kept everyone laughing for the duration of his toast which set a very lively and enjoyable tone for the entire lunch.

As dessert and coffee were being served, Roger Buckland presented gold Macdonald Reunion pins to each of the returning graduates from the Class of '36 and 25-year Anniversary pins to the Class of '61. He also presented the Gold Key Awards.

The success of the Reunion depends on many people, but, in particular, it is the work of class chairmen that bring us all back to Macdonald. The Branch thanks them for their leadership and persistence. Computer results were a little slow due to electronic malfunctions and input difficulties so that the shield was awarded to the Class of '61 at the Dean's reception following the Reunion Luncheon.

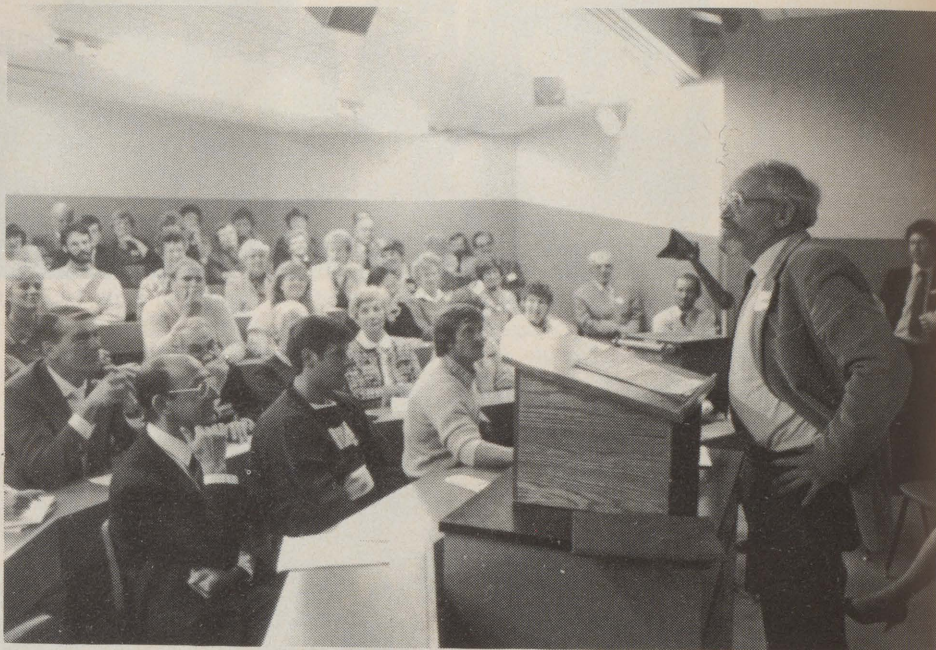
Dean Buckland was asked to make a few comments to bring the lunch to a close. The Dean spoke about the changes at Macdonald College, the plans for the future, and the role of graduates in this continuous process of change. Particularly interesting were his comments about the enrolment of the students at Macdonald which had increased dramatically over the last 10 years and now appears to have reached a plateau.

The Alumni Volunteer recruiting organization which has begun on the downtown campus will be activated in the near future among Macdonald graduates around the world. The purpose of this volunteer group is to encourage young students to consider agriculture and the possibility of study-

ing at Macdonald.

Dr. Buckland closed by thanking the graduates for coming the distances that they did to enjoy Reunion weekend with old friends and promised to respond to the questions that all graduates might have during his recep-

tion. Special thanks were given as well to the Reunion Committee chaired by Jean McHarg, and especially to Katherine Whitehurst and Susan Reid of the Martlet House staff for their help and patience in coordinating Reunion '86.



Dr. Eugene Donefer, Director of McGill International, sharing his expertise on "Feeding a Hungry World."

REUNION '86 SEMINAR

This year's format of scheduling open seminars as part of the Reunion '86 agenda proved extremely popular. The sessions were very well attended and provided an excellent atmosphere for the exchange of ideas and a good opportunity for a candid discussion between the expert panelists and graduates.

The subject matter "The Pesticide Controversy" and "Feeding a Hungry World" covered a good and general cross-section of current public consensus and world focus.

The session on "Pesticides" dealt with the many issues that face us as the use of farm, house, and garden pesticides is ever-increasing. The entomologist is justly concerned because of the danger to "his" environmental cycle, and the plant scientist is just as concerned because the use of pesticides are essential to the protection of food crops, and now we have the geneticist, who is concerned with the accumulation and long-term effects of these chemicals on plants and animals.

The seminar on "Feeding a Hungry World" touched on many of the concerns that surround the problem of famine and the need to develop and implement sound, long-term programs to alleviate the problem. Graduates were reminded that there exist problems of malnutrition in areas of our own Canadian population. The seminar touched on many of the physical, economic, sociological, bureaucratic, political and emotional aspects of the problem. If it was not clear before the seminar, it certainly was afterwards that the solution is not as simple as food relief programs.

Given the time constraints the seminar could only whet the appetite of participants. The response to this format was so successful that this program will be continued in future reunions.



Catching up on news of the Class of '56 were, l to r, seated, Doug Conley, David George, Ann Anderson, Rod McComb, and, standing, Grace Quon, Joan Marshall, Joyce George, and Sally McComb.



The 25th anniversary class members of Agriculture and Home Economics '61 assemble for a class photo in Stewart Dining Room.

The Honour Shield

The Dean's reception hosted by Dr. Roger Buckland at 4:00 p.m. in the Macdonald Stewart Staff Lounge proved to be the perfect meeting place for more than 150 graduates who gathered together to await the news of the 1986 Honour Shield Competition. The Shield is presented each year to the class with the highest percentage of graduate participation.

Most graduates took the opportunity to relax a little after a busy day, sample the hors-d'oeuvres and rum punch, and prepare themselves for the evening class parties.

Much of the spirit and enthusiasm of the day was evident outside the lounge as graduates scrambled to sign up for the competition at the last minute.

Friendly rivalry gave way to cheers as Grant Ross announced that there was a tie for first place between the

Class of Agriculture and Home Economics '61 and the Diploma Class of '61, both with a 37.5 per cent attendance. It was a close competition all around with the third place going to the Class of Agriculture and Home Economics '56 with a 30.5 per cent attendance.

Sincere thanks go to all Chairmen for their work in keeping the class members together and bringing them back to the college for yet another memorable reunion.



Front row, l to r, Evalyn Wright Horne, Long Island, Diane Lariviere Belle, Nepean, Deryl Monaghan Williams, Beebe, Peggy Wickens Thomas, Pembroke, Madalene Miltimore Darrah, Sutton, Gertrude Dudley Gruer, Sutton, Ethel Banfill George, Knowlton. Row 2: Charles Elliott, Verdun, Alida Sparey Urquhart, Pointe Claire, Carol Asner Schreiber, Montreal, Shirley Brown Hoskin, Farnham, Jean Brown Rodger, Ormstown, Madeleine Raguin Leslie, Dorval, Margaret McNeill Graham, Bristol, Mary McArthur Oulton, Lachine, Doreen Field Holmes, Sutton, Grace Bunce Mullin, Belleville, Ramsey Williams. Row 3: Danny Gruer, Marjorie McConnell Howard, Aylmer, Beverley Lawrence Osburne, Victoria, Betty McAllister Cornell, Toronto, Muriel Shapiro Paradis, Rosemere, Geraldine Morrison Williams, Anjou, Gordon Mullin. Row 4: Matti Erkkila, Cameron Leslie, Grant Cornell, George Urquhart, Fred Graham, Cliff Thomas, and Graham George.

DIPLOMA EDUCATION 40TH REUNION

On Saturday, June 7, 1986, the Diploma Education 1946 graduates held a 40th Anniversary Reunion at Macdonald College. The following are a few comments from Doreen Holmes of Sutton, Que.

"People started arriving even before 9:30 a.m. As each came in I could see the hesitation and the I-wonder-if-I'll-recognize-anyone-look. But the shyness didn't last long. Some were recognized immediately; for others it took a second or two, but within an amazingly short space of time, the 40 years had evaporated and we didn't stop talking till the last ones left about 5:30.

"The photo shows 22 classmates and 10 spouses or friends. Three others who intended to be there were, unfortunately, unable to at the last moment.

"We had a walking tour of the Main Building and Stewart Hall, both changed in many ways. For example, our old library has been expanded to include an extension on the main floor and the former assembly hall is now also part of the library. And when we went to inspect Miss Ramsey's room,

we discovered a whole complex of offices. Stewart Hall has been completely renovated and turned into apartments for from two to four John Abbott CEGEP students with frig, stove, and microwave oven, among other things. And you should see the laundry room — lovely yellow washers and driers! There's also a TV room, ping-pong table, and a program of activities all week long — Dean Laird would be horrified. Our young guide told us there's even a study room 'in case your roommates are having a party and you want to study.'

"Back at the lovely lounge in the Macdonald Stewart Building Madalene Miltimore Darrah started things off by reading letters and well-wishes from many who couldn't be there. She also noted Beverley Lawrence Osburne had come the furthest — all the way from Victoria, B.C., and Evelyn Wright Horne was second, coming from Huntingdon, Long Island. Carl Asner Schreiber read Ruth Kelley's History of the Elementary Class of 1946, followed by Madeleine Raguin Leslie doing the same for Ethel Hicks Brushett's Intermediate Class History. The prophecies, originally written and presented in 1946 by Madalene Miltimore and Betty Derick, were read for us by

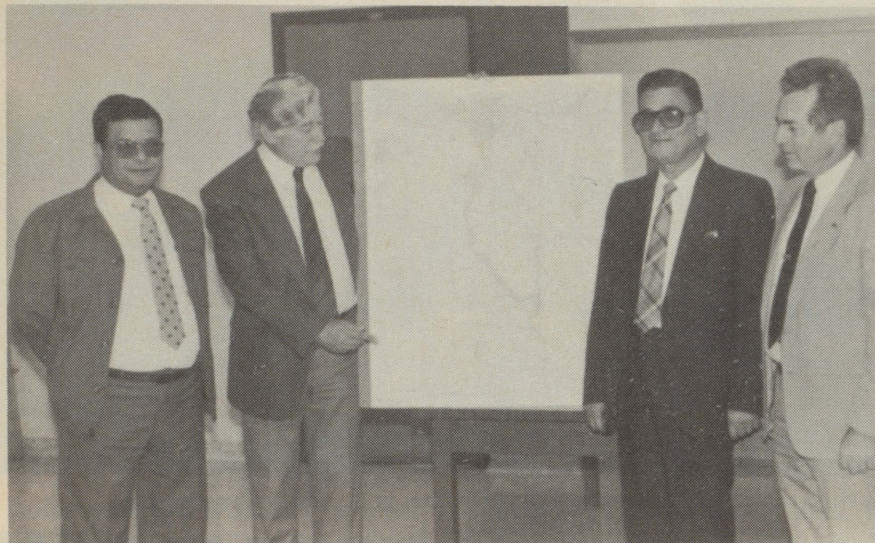
Madalene herself and by Alida Sparey Urquhart. We all joined Shirley Brown Hoskin in toasting the staff of '45-'46 (originally done by Joyce Miller Ness) and it was my pleasure to give a modern day toast.

"As soon as the program was over, our buffet lunch was ready. People circulated the whole time, which is precisely why we chose a buffet. Before we knew it, it was time to leave, but I'm sure everyone went home happy. I know I did."

Doreen Holmes also hosted a mini reunion at her home in Sutton in August. One person who was not able to be at the June reunion was able to attend — Dorothy Paulette. "It was certainly wonderful to see her," Doreen Holmes said. "We were blessed with a beautiful sunny day, all too rare this summer. Lunch was "pot luck," a veritable feast. One of the highlights was the corn-on-the-cob that Shirley Hoskin brought, fresh from her garden. Most of the day was spent on the verandah in full view of the lovely Sutton Mountains. We chatted and tried to catch up on the past 40 years. Before everyone reluctantly headed for home, Mary Oulton offered her home in Arundel for a get-together next summer. Sounds wonderful."

newsmakers

on campus



CANADA-EGYPT-McGILL AGRICULTURAL RESPONSE PROGRAM: Drs El-Keraby and Tayel, Egyptian agricultural officials, discussing McGill involvement in the implementation of the CIDA program with Professors Lawson and Downey.

Services agricoles Banque de Mont



As part of the Outstanding Young Farmer Program and National Judging and Recognition event to be held in Calgary in October, a competition to select the Outstanding Young Farmer of Quebec was held in August at Macdonald College. Pictured in the above photo are, l to r, Marcel Couture, Associate Dean, Community Relations, and a judge at the final event in Calgary in October, Pierre Gauthier representing one of the sponsors, the Jaycees, Larry Rewiths, representing the Calgary Stampede, Mme Louise Filion, wife of the Quebec winner Fernand Filion, and Isidore Charron from the Bank of Montreal Agricultural Services. Mr. Filion, who has a dairy farm in Lyster, Que., was one of the three winners at the finals in Calgary.

Greetings from Alberta! When PROFESSOR ROBERT S. BROUGH-TON of the Department of Agricultural Engineering was in Edmonton in

August teaching the drainage component of the course on Irrigation, Drainage and Flood Control for the Canadian International Training Insti-

tute for Water Resources, he met with several Mac Agricultural Engineering grads, including: **DAVID SCOTT**, '71, **DAVID NEILSON**, '72, and **NEIL McALPINE**, '81. Recent visitors to the campus were **NADER FOROUD**, PhD '81, who is now at the Agriculture Canada Research Station in Lethbridge, and **DAVID MONAGHAN**, '82, also with Agriculture Canada in Lethbridge. Both are involved with irrigation work in southern Alberta.

DR. RALPH ESTEY, Emeritus Professor in the Department of Plant Science, and his wife Doreen travelled this past summer in Portugal, Morocco, Gibraltar, Spain, and the British Isles. While in Scotland they participated in a mycological foray with members of the British Mycological Society and were head-table guests at the 150th anniversary banquet of the Edinburgh Botanical Society. Back in Canada, Ralph Estey was doubly honoured. In May, the Quebec Society for the Protection of Plants made him an Honorary Member and in July the Canadian Phytopathological Society made him a Fellow.

DR. ROGER KNOWLES, of the Department of Microbiology, attended the 4th International Symposium on Microbial Ecology in Ljubljana, Yugoslavia, in August and was elected to the executive committee of the International Commission on Microbial Ecology. He also became First Vice-President of the Canadian Society of Microbiologists and was recently made an Honorary Member of l'Association des Microbiologistes du Quebec.

DONNA KUPRANYCZ, PhD candidate in the Department of Food Science and Agricultural Chemistry, received the coveted "Best Paper Award" for her paper given at the American Oil Chemists Annual Meeting in Honolulu, Hawaii, last May.

The 1986 Student Design and Paper Competition winners from the Department of Agricultural Engineering (American Society of Agricultural Engineering, North Atlantic Region) were: First Place — Agricultural Engineering **CAMERON McGOWAN** "Effect of Organic Matter and Tillage on Soil Aggregation and Aggregate Stability"; Second Place — **MARION**

RIGBY "Influence of Polyethylene Mulches and Tunnels on Soil Microclimate"; and Second Place — Design — **YVES LAQUERRE** "Design of a Machine to Invert Windrows."

DR. JOHN MOXLEY, Director of DHAS, was the 1986 recipient of the Canadian Association of Animal Breeders Award of Merit, which is given in recognition of major contributions to the artificial insemination industry.

DR. HOWARD STEPPLER, Emeritus Professor in the Department of Plant Science, brings greetings from Somalia where he met **MOHAMOUD AW DAHIR MUNNIR**, a former student in Animal Science, and now a lecturer at Somalia National University. Closer to home, Dr. and Mrs. Stepler spent an afternoon with **BUNNY** and **ORVILLE OLSEN** in northern Manitoba. Dr. Olsen was a staff member of the Department of Plant Science before leaving for Newfoundland in the early 50s.

off campus

CHEA CONFERENCE

MARGARET WEEKS, BSc (FSc), '72, was the Chairman of the Canadian Home Economics Association Conference held in Charlottetown, P.E.I. It attracted 325 Home Economists from all provinces and territories in Canada. **JEAN McHARG**, BSc (HEc) '60, retired as Vice-President, Professional Practice, after four years on the executive, and **SANDRA HENRICO**, BSc (HEc) '69, begins a term as Quebec Director replacing **LIZ JENNAWAY EAMAN**, who has served as Quebec Director for the past two years.

ONTARIO'S NEAR NORTH SUMMER REPORTER

While working for the Ontario Ministry of Agriculture and Food (OMAF), this past summer in North Bay, 3rd year student **KELLEY ALLEN** "found a real nest of Mac people in Ontario's near north. **WALKER RILEY**, former Professor in the Agronomy Department and Director of the Diploma Pro-



Fran Wren captures a favourite view of the harbour of St. Andrews on canvas.

A Warm Welcome in St. Andrews

Any Mac staff or graduates who happen to find themselves in St. Andrews by-the-Sea, N.B., are assured of a warm welcome from **FRANCES WREN**, as your editor can attest to, having spent a week there last July. Fran Wren came to Macdonald College in 1942 to teach handicrafts and stayed for 29 years, retiring in 1971. While at Macdonald she taught leatherwork, wood carving, weaving, lino block printing, enamel work, silver jewellery, as well as other crafts when she had children's classes. In her leisure time, she also enjoyed painting and illustrating. Fifteen years of retirement have in no way dulled Fran's enthusiasm for handicrafts nor her zest for life. She still is a very active

woman. Having been settled by United Empire Loyalists, St. Andrews is seeped in history and you can find no better guide to point out historical buildings, including her own home, and other landmarks of interest. She does voluntary work in the archives each week, teaches art and bridge to seniors, helps to "baby-sit" the Anglican Church when it is open to the public, and belongs to the MAD association, a group of people actively involved in music, art, and drama. She also finds time to garden, cook, and, of course, continues with her painting and wood carving. Fran was particularly proud of a wood plaque on one of the church walls that she had recently carved in memory of her mother and father. She delights in returning to the Macdonald area at least once a year; the rest of the time she "keeps in touch," in part, by reading the Journal.

gram, has retired as Soil and Crop Specialist for OMAF in North Bay and has since been operating his own small farm in Bracebridge, Ont. **WAYNE CROSSFIELD**, Dip '69, is operating a Holstein dairy farm in Powassan. Wayne originally comes from Cowansville. Wedding bells rang for **SUSAN ROBINSON**, BSc (Agr) '78, in Beaconsfield, Que., this past July. Susan, now also known as Mrs. Stephen Clare, is Ontario's pasture specialist for OMAF. Both Susan and

Stephen are MSc graduates from the University of Guelph. **CHRISTIAN GROTHE**, BSc (Agr) '78, is employed by OMAF and is the Farm Management Specialist in New Liskeard. **DANIEL TASSE**, BSc (Agr) '84, is also working in New Liskeard as Red Meat Advisor for OMAF. (Ed. Note: "Next time you are in the area, Kelley, do say 'hi' to **Doreen Davidson**, formerly in the Registrar's office. She and her husband retired to North Bay — and love it!")

NEWS OF SOME RECENT POSTGRADS

DR. DAVID BIRD, Director of the Raptor Research Centre, tells us that **KELLY BLOCK** has completed her MSc degree on cryopreservation of falcon semen and is now in Puerto Rico working on endangered parrots for the U.S. Fish and Wildlife Service. From Renewable Resources, **STAS OLPINSKI**, is Director of the Makivik Research Laboratories in Kuujuaq, and **ELAINE CHRISTENS** has started a PhD program in Texas. From Plant Science, **SIMON BEDASIE** has returned to Trinidad; **HELENE CREVIER** is working for Laboratoire A.M. Dion Inc. in Boisbriand, Que., **NANCY McLEAN** is doing research at the Nova Scotia Agricultural College; **STEPHEN MONETTE**, MSc, will work on an MSc in landscape architecture at Guelph; **LOUIS ROBERT**, is working for the P.E.I. Ministry of Agriculture; **DR. HELIO BURITY** has returned to Brazil, and **DR. DANIEL CLOUTIER**, is a research scientist at the Agriculture Canada Research Station in l'Assomption.

DR. C.A.V. BARKER, MSc (Agr) '45, internationally known for his pioneering research in the fields of animal reproduction and artificial insemination, has been appointed to the Order of Canada, the country's highest distinction. Dr. Barker taught in the Department of Clinical Studies at the University of Guelph from 1945 until 1984 and is now a Professor Emeritus. He is a two-time winner of the Canadian Society for the Study of Fertility's award for research in animal or human reproduction. Last year he and retired History professor Margaret Evans received the Royal Society of Canada's Jason A. Hannah Medal for their book *Century One*, a history of the Ontario Veterinary Association. Since 1970 he has served as historian and archivist for OVC.

MORRIS KEENIE, BSc (Agr) '49 has retired from the position as Supervisor of Loans for the Nova Scotia Farm Loan Board.

EARLE GILCHRIST, BSc (Agr Eng) '50, who recently retired from the position as Director of the Agricultural Engineering Branch of the N.B. Department of Agriculture, is the new

Secretary-Manager of the Atlantic Land Improvement Contractors Association (ALICA). In his new role Earle Gilchrist will expand communication with ALICA members, other contractor associations, and allied suppliers/manufacturers, and will effectively co-ordinate day to day ALICA business affairs.

STUART F. ALLABY, BSc (Agr) '51, has recently retired from the position of Director of the Livestock Services Branch of the N.S. Department of Agriculture and Marketing.

MORRIS SCHNITZER, BSc (Agr) '51, MSc (Agr) '52, PhD '55, is one of four members of Agriculture Canada's Land Resource Research Centre who have contributed chapters for the Soil Science Society of America publication *Interactions of Soil Minerals with Natural Organics and Microbes*. This 606-page publication features 32 authors from North America, Europe, Asia, and Australia, of whom six are Canadians.

JACK D. JOHNSON, BSc (Agr) '52, has been appointed Director of the Livestock Services Branch of the Nova Scotia Department of Agriculture and Marketing. He first worked as a Livestock Fieldman with the Department. In 1955 he joined the Farming and Fisheries Department of the CBC and was appointed the Regional Director. He returned to the Department in 1966 assuming the position of Director for the Soils and Crops Branch.

DR. E. J. LeROUX, BSc (Agr) '52, PhD '54, DSc '73, was recently awarded the degree of Doctor of the University by the University of Ottawa. Dr. LeRoux was also presented with an Honorary Life Membership by the Canadian Seed Growers' Association.

Dr. W. LLOYD SEAMAN, BSc (Agr) '56, of the Plant Research Centre in Ottawa was recently made a Fellow of the Canadian Phytopathological Society.

RICHARD J. HUGGARD, BSs (Agr) '58, has been appointed Chief Director of Operations with the N.S. Department of Agriculture and Marketing. Formerly Director of Extension Services, Richard Huggard joined the Department's Livestock Services

Branch as a Beef Specialist. He was subsequently appointed Superintendent of Livestock and later as director of the Livestock Services Branch.

ALEX V. SKEPASTS, BSc (Agr) '58, MSc (Agr) '60, head of the agronomy section at the New Liskeard College of Agricultural Technology, was recently presented with an Honorary Life Membership by the Canadian Seed Growers' Association.

DR. CARL WILLIS, BSc (Agr) '59, has been named Research Coordinator of Agriculture Canada's Program Coordination Directorate. Carl joined the Agriculture staff at Charlottetown Research Station in 1962. In 1975 he became Assistant Director of the Station. In 1984 he was seconded to the Program Coordination Directorate as special adviser.

Agriculture Canada's Ottawa Research Station and the Chemistry and Biology Research Institute have been joined to form the Plant Research Centre with **IAN DE LA ROCHE**, BSc (Agr) '63, as the new Director.

ROLLAND L. HAYMAN, BSc (Agr) '66, has been named Director of Extension with the N.S. Department of Agriculture and Marketing. (See article, this issue, page 10.)

JOHN E. REDDEN, BSc (Agr) '66, has been appointed Assistant Director of Extension of the Nova Scotia Department of Agriculture and Marketing. He joined the Department as a 4-H representative for the eastern region of the province and was later transferred to the position of 4-H rep for the western region. In 1973 he became provincial 4-H supervisor and held that position till this recent appointment. In 1974 he travelled under a CIDA program to Botswana where he helped to establish the 4-H program in that country. He is a former President of the Canadian 4-H Council and is the 1986 recipient of the C.A. Douglas Extension Award.

ROBERT G. ADAMS, BSc (Agr) '69, has been appointed Supervisor of Loans with the Nova Scotia Farm Loan Board in Truro. He joined the Department of Agriculture and Marketing as a 4-H rep and transferred to the Farm Loan Board in 1971.

CHARLES COLES, BSc (Agr) '72, has been appointed Supervisor and Farm Management Specialist (Acting) with the Rural Development Section of the P.E.I. Department of Agriculture. He will oversee the Section which assists in the development of 4-H and rural organizations through leadership development activities and programs. As Farm Management Specialist he will provide co-ordination and leadership in financial and other management programs.

ELIZABETH (LIZ) CROUSE, BSc (Agr) '79, has been appointed supervisor of 4-H with the Extension Services Branch of the Nova Scotia Department of Agriculture and Marketing. A native of Montague, P.E.I., Mrs. Crouse was actively involved in the 4-H program in that province. In 1979 she joined the N.S. Department of Agriculture and Marketing as 4-H representative for Hants and Kings Counties. She is currently director of the 1986 National 4-H Leaders' Conference.

To **JOANNE (ENRIGHT)**, BSc (Agr) '80, and **HARRY VAN DER LINDEN**, BSc (Agr) '78, a son, Scott John, born on June 7, 1986, and a brother for Jason.

To **PETER**, Dip '80 and **CHARLOTTE GRIFFITH**, BSc (FSc) '83, a son Kyle William, born April 8, 1986, a brother for Erin and Anne.

It was wedding bells at Sutton, Que., on March 22, 1986, for **SCOTT DAVIDSON**, Dip '81, and Kelly Holmes. Best man for the occasion was another Dip '81 grad **CLANCY ANNESLEY**, and **GEOFFREY McNAUGHTON**, also Dip '81, was among the wedding guests. Scott has joined Clancy as assistant herdsman on Philip O'Roarke's farm in Campbellford, Ont. Clancy has been herdsman there for 1-1/2 years.

NORA (CLANCY) TEMPLETON, BSc (Agr) '82, and husband John are the proud parents of Matthew Todd, born September 2, 1986.

GARY LAJOIE, Dip '83, BSc (Agr) '85, who was By-Product Manager for Canada Packers in Moose Jaw, Sask.,

has been appointed Beef Product Manager for Canada Packers in Toronto.

LOUISE BEGGS, BSc (FSc) '84, who is currently enrolled in a Masters of Science Program in Human Nutrition at the University of British Columbia, has been presented with the McCain Foods Award. Before embarking on her Masters, Louise was in Brampton, Ont., as the consulting dietitian for Canada's first storefront dietetic practice.

deceased

DR. ARTHUR J. W. MAW, BSA '23, at Belleair Bluffs, Florida, on August 9, 1986.

DR. T. C. VANTERPOOL, BSA '23, MSc (Agr), '25, of Victoria, B.C., in November 1985.

HILDA (JOHNSON) BAIRD, BHS '28, at Moncton, N.B., on May 22, 1986.

KATHLEEN (CHRISHOLM) DAWSON, BHS '28, at Victoria, B.C., in November, 1985.

EDWARD M. SNILNER, BSc (Agr) '36, at Grandmere, Que., on June 4, 1986.

ELIZABETH (MacMILLAN) DRYDEN, BHS '37, of Feura Bush, N.Y., several years ago.

ROBERT J. H. BAYLIS, BSc (Agr) '38, of Ottawa, Ont., in 1981.

JEAN L. (PECK) MORRISON, BHS '42, at Toronto, Ont., on April 15, 1986.

HELEN ELIZABETH (DAUBNEY) SIMINOVITCH, Msc (Agr) '47, at Ottawa, Ont., on April 9, 1986.

BRUCE TRENHOLM, BSc (Agr) '47, of Mahone Bay, N.S., on September 13, 1986. (See **NEWSMAKERS**, MacDonald Journal, February 1986).

DR. FRANCIS E. CHASE, PhD '51, of Guelph, Ont., on March 4, 1986, in Florida.

GEORGE M. KAY, BSc (Agr) '52, of Deep River, Ont., on October 1, 1983.

SHIRLEY E. (ROWE) PICARD, BSc (HEC) '53, of Toronto, Ont., on December 28, 1985.

LUDMILA C. (JANKOV) LEPIK, BSc (Agr) '61, at Parry Sound, Ont., on July 26, 1986.

DOUGLAS A. NESS, 1904-1986

Douglas A. Ness, Dip '23, '27, a well known breeder, importer, and exporter of Ayrshire cattle died on July 7, 1986, at the age of 82. As a senior partner in the firm of R.R. Ness & Sons, Douglas Ness guided the herd at Burnside Farms, Howick, Que., to great achievements. Known internationally for high quality breeding stock, also as exhibitors at the major exhibitions, in particular the Royal Winter Fair, Burnside Farms were consistently winners of many of the coveted awards. Douglas Ness also judged cattle at most of the major exhibitions in Canada and the eastern United States.

In 1977, Douglas Ness was inducted into the Canadian Agricultural Hall of Fame. During his long career he served as President of the Ayrshire Breeders Association of Canada, Director of the Royal Winter Fair, and as a member of the Joint Dairy Breed Committee for several years.

Always active in his community, Douglas Ness was the first leader of the Howick Calf Club, and throughout his life he worked with the young people in 4-H, coaching them on judging cattle and preparing them for exhibitions. This past spring he bought three calves for one of his nephew's three children and saw them exhibited at the Ormstown Exhibition.

He served as President of the Ormstown Exhibition, on the Board of the Barrie Memorial Hospital, the Board of Trustees of Howick United Church, and was a member of the Howick Curling Club.

Douglas Ness was predeceased by his wife Muriel, and daughter Eileen. He is survived by his daughter Bernice, son Roland, six grandchildren, and one great-granddaughter. He will be sadly missed by family, friends, and associates.

NORMA DETLOR PATERSON, a long-time member of the college community, died on May 5, 1986. The backbone of the college library for 32 1/2 years, Norma Detlor was the librarian who knew everyone, knew where to find everything, and was friendly and helpful to all. She retired in 1960 and married Roy Paterson in 1963. She was a friend to many and will be fondly remembered.

On August 1, 1986, James (Jim) Houston passed away at his home in Ste-Anne de Bellevue in his 73rd year. Dr. L.E. Lloyd, former dean of the Faculty of Agriculture, read the eulogy at Jim's funeral service and gave us permission to reprint it in the Journal. For anyone knowing Jim, it is a most fitting tribute.

In memory of Jim Houston, a scholarship fund is being established at Macdonald College. Donations towards this fund may be sent to the Registrar's Office, c/o Yolande Frechette, Box 287, Macdonald College, Que., H9X 1C0. Tax receipts are available upon request.

It is a great privilege to be asked to say a few words about an old friend and colleague — Jim Houston.

In trying to decide what my exact role should be today, I came to the conclusion that I should attempt to speak for the many people whose lives, in one way or another, have been touched by this man. Having made that decision, it became immediately obvious that my task would not be an easy one since Jim's interests and talents were so varied. This means that each one of us may well remember Jim Houston in a way that reflects our particular association with him over the years. Perhaps it also means that there probably are groups of us that have common remembrances. I shall attempt in the next few minutes to project the thoughts of a number of such groups.

Before doing this, however, I would like to suggest that Jim Houston would not want to see a church full of people with overly sad faces. Certainly we are sad, but don't you think that we should be paying our tribute to Jim in his way — with a little smile on our faces and a chuckle deep down in our throats. It may not be easy, but let's try!

Now back to the groups of people that I spoke of earlier, and the first group I must mention is Jim Houston's immediate family. Those of you who can remember a long way back may have known him as a loyal and obedient son of the Manager of the Macdonald College farm. Many of us have known him as Paulette Cousineau's husband of 40 years, as Christine Francoeur's father, and more recently as the doting grandfather of Christine and Bob's three children, Danielle,

JAMES HOUSTON 1914-1986

Dominique, and Paul. The smiles and the chuckle are difficult today for these and other members of Jim's immediate family; however, they will come, and treasured memories will remain for each member of his family.

The next group of people I can think of as having common remembrances of Jim Houston is the staff of Macdonald College, and here I include the farm staff and the academic and support staff. This has to include a vast



number of people, since Jim was born and brought up on the Macdonald College farm and, when he retired eight years ago, he had completed 42 years of service at Macdonald College. As we know, official retirement meant very little to Jim as he maintained an office on the farm right up to the present time. Those Macdonald College staff members who are still around will quickly point to Jim's many accomplishments on the farm over his lifetime. They will remember and they pay tribute with a smile and a chuckle today and in the future.

All those students at Macdonald College who had anything to do with the farm during the course of their studies will attest to the help and encouragement they received from Jim Houston. This was always conveyed in a quiet yet forceful way, and not many students saw fit to disregard the advice they received from Jim. All these students will remember and now pay tribute with a smile and a chuckle.

I think now of another group — the farmers of Quebec, especially those involved in purebred cattle associations. Jim Houston's love for animals covered a lifetime, and this love led to his involvement with any attempts to improve the performance of both beef and dairy cattle. As an illustration, he has acted as Secretary of the Quebec Aberdeen Angus Association for almost 20 years and also served as a Director of the Canadian Aberdeen Angus Association for a period of 15 years. For many years Jim represented the College at various agricultural fairs where he, more than anyone else, would be recognized as Mr. Macdonald College. The farm community will remember Jim Houston and will pay tribute over the years with a smile and a chuckle.

Then we have all those people who will remember Jim as an athlete. How many of you are aware of Jim Houston as a track star during his early days? Perhaps it is easier for many of us to recall Jim playing first base on the Cousineau softball team at Harpell Park during the late 1940s. As a hockey player, he was noted for his body checking ability, and I can personally attest to this as the recipient of one of his hardest checks. Many of us have had the pleasure of a few rounds of golf with Jim at Whitlock, but few among us ever managed to beat him at that game. Regardless of the sport, Jim played it well, with enthusiasm and a desire to win, but always with great consideration for his teammates and respect for his opponents. All his sports minded friends will remember and pay tribute with an especially wide smile and loud chuckle.

Jim Houston was a son of Ste. Anne de Bellevue and a staunch member of the Macdonald College community. He was a farmer at heart, with the farmer's typical love for all living things — plants as well as animals. He was a teacher of young people more often by example than in a classroom sense. He was a sportsman in the highest sense of the word. His love for his family, his loyalty to his profession, and his concern for his many friends have provided an enriching experience for a great number of people.

We are all grateful.

Thank you Jim.

**L.E. Lloyd
Friend and colleague**



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